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Attorneys for Plaintiff BioCardia, Inc.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

BIOCARDIA, INC.

Plaintiff,

v.

nVISION MEDICAL CORPORATION,
ARBORETUM VENTURES IV, LP, ASTIA
ANGEL nVISION LLC, CATALYST HEALTH
VENTURES (PF), L.P., CATALYST HEALTH
VENTURES FOLLOW-ON FUND, L.P.,
CATALYST HEALTH VENTURES III, L.P.,
CATALYST HEALTH VENTURES, LP, CHV
INVESTMENTS, LLC, CHV PARTNERS
FUND III, L.P., CHV-E PARTNERS III, L.P.,
DRAPER ASSOCIATES INVESTMENTS, LLC,
DRAPER ASSOCIATES RISKMASTER FUND
II, LLC, DRAPER ASSOCIATES
RISKMASTERS FUND III, LLC,
EXCELESTAR VENTURES I, LLC,
EXXCLAIM CAPITAL PARTNERS I, LP,
FOGARTY INSTITUTE FOR INNOVATION,
GOLDEN SEEDS nVISION MEDICAL, LLC,
LIFE SCIENCES ANGEL INVESTORS VIII,
L.L.C., LMNVC, LLC, AND SERAPH
nVISION, LLC,

Defendants.

CASE NO. 3:20-cv-02829-VC

SECOND AMENDED COMPLAINT

JURY TRIAL DEMANDED

Plaintiff BioCardia, Inc. (“BioCardia”) alleges claims against defendants nVision Medical Corporation (“nVision”), Arboretum Ventures IV, LP, Astia Angel nVision LLC, Catalyst Health Ventures (PF), L.P., Catalyst Health Ventures Follow-On Fund, L.P., Catalyst Health Ventures III, L.P., Catalyst Health Ventures, LP, CHV Investments, LLC, CHV Partners Fund III, L.P., CHV-E Partners III, L.P., Draper Associates Investments, LLC, Draper Associates Riskmaster Fund II, LLC, Draper Associates Riskmaster Fund III, LLC, Excelestar Ventures I, LLC, eXXclaim Capital Partners I, LP, Fogarty Institute for Innovation, Golden Seeds nVision Medical, LLC, Life Sciences Angel Investors VIII, L.L.C., LMNVC, LLC and Seraph nVision, LLC (including nVision collectively “Defendants”; excluding nVision collectively the “Shareholder Defendants”) seeking correction of inventorship, damages, including damages for Defendant’s misappropriation of trade secrets and Ms. Surbhi Sarna’s breach of contract, and disgorgement of the Shareholder Defendants’ unjust enrichment.

PARTIES

1. BioCardia is a corporation organized and existing under the laws of Delaware with its principal place of business at 125 Shoreway Road, Suite B, San Carlos CA 94070.

2. BioCardia is informed and believes and on that basis alleges that Defendant nVision is a Delaware corporation with its principal place of business at 1192 Cherry Avenue, San Bruno, CA 94066, within this District, and is a wholly-owned subsidiary of Boston Scientific Corporation, a corporation organized and existing under the laws of the state of Delaware with its principal place of business at 300 Boston Scientific Way, Marlborough, MA 01752-1234 which acquired nVision, including all of its intellectual property, through a Merger on April 13, 2018.

3. BioCardia is informed and believes and on that basis alleges that defendant Arboretum Ventures IV, LP is a Michigan Limited Partnership with a place of business at 303 Detroit St, Ste 301, Ann Arbor, MI 48104 whose agent for service is The Corporation Trust Company, Corporation Trust Center, 1209 Orange St., Wilmington, DE 19801 and is a former shareholder of nVision whose shares were acquired by Boston Scientific Corporation, 90% of the initial consideration for which was paid in cash and 10% held in escrow, and additional consideration for which shares is subject to an earn-out based on nVision’s performance.

1 Arboretum Ventures IV, LP formed in 2015 and has approximately \$203.2 million in assets.
2 Their minimum amount of investment is \$250,000. In 2019, Arboretum Ventures raised \$252
3 million for its fifth fund.

4 4. BioCardia is informed and believes and on that basis alleges that defendant Astia
5 Angel nVision LLC (“Astia”) is a Delaware Limited Liability Company with a place of business
6 at One Market Plaza, Spear Tower 24th Floor San Francisco, CA 94105, whose agent for service
7 is Harvard Business Services, Inc. 16192 Coastal Hwy Lewes, DE 19958, and is a former
8 shareholder of nVision whose shares were acquired by Boston Scientific Corporation, 90% of the
9 initial consideration for which was paid in cash and 10% held in escrow, and additional
10 consideration for which shares is subject to an earn-out based on nVision’s performance.

11 BioCardia is informed and believes and on that basis alleges that Anula Jayasuriya served on the
12 Board of Trustees of Astia. On or around December 4, 2010, while Ms. Sarna was still working
13 at BioCardia, Ms. Jayasuriya reached out to Ms. Sarna via her BioCardia email address and
14 introduced Ms. Sarna to Linda Greub. Ms. Sarna then followed up with Ms. Greub to request
15 assistance in conceptualizing a catheter system that was the invention of a provisional patent
16 application Ms. Sarna filed while still working at BioCardia. BioCardia is informed and believes
17 and on that basis alleges that Ms. Jayasuriya knew that BioCardia was a medical device company
18 specializing in catheters. BioCardia is informed and believes and on that basis alleges that Astia,
19 through its affiliation with Ms. Jayasuriya, knew or should have known that the intellectual
20 property that formed the basis of nVision Medical Corporation had been misappropriated by Ms.
21 Sarna.

22 5. Founded in 1999, Astia Angel nVision LLC has made over fifty (50) investments.

23 6. BioCardia is informed and believes and on that basis alleges that defendant
24 Catalyst Health Ventures (PF), L.P. is a Massachusetts Limited Partnership with a place of
25 business at 50 Braintree Hill Office Park Suite 301 Braintree, MA 02184, whose agent for service
26 is The Corporation Trust Company, Corporation Trust Center, 1209 Orange St. Wilmington, DE
27 19801, and is a former shareholder of nVision whose shares were acquired by Boston Scientific
28 Corporation, 90% of the initial consideration for which was paid in cash and 10% held in escrow,

1 and additional consideration for which shares is subject to an earn-out based on nVision's
2 performance. Catalyst Health Ventures received \$60.5 million for their fourth fund and has over
3 \$100 million in capital.

4 7. BioCardia is informed and believes and on that basis alleges that defendant
5 Catalyst Health Ventures Follow-On Fund, L.P. is a Massachusetts Limited Partnership with a
6 place of business at 50 Braintree Hill Office Park Suite 301 Braintree, MA 02184, whose agent
7 for service is The Corporation Trust Company, Corporation Trust Center, 1209 Orange St.
8 Wilmington, DE 19801, and is a former shareholder of nVision whose shares were acquired by
9 Boston Scientific Corporation, 90% of the initial consideration for which was paid in cash and
10 10% held in escrow, and additional consideration for which shares is subject to an earn-out based
11 on nVision's performance.

12 8. BioCardia is informed and believes and on that basis alleges that defendant
13 Catalyst Health Ventures III, L.P. is a Massachusetts Limited Partnership with a place of business
14 at 50 Braintree Hill Office Park Suite 301 Braintree, MA 02184, whose agent for service is The
15 Corporation Trust Company, Corporation Trust Center, 1209 Orange St. Wilmington, DE 19801,
16 and is a former shareholder of nVision whose shares were acquired by Boston Scientific
17 Corporation, 90% of the initial consideration for which was paid in cash and 10% held in escrow,
18 and additional consideration for which shares is subject to an earn-out based on nVision's
19 performance.

20 9. BioCardia is informed and believes and on that basis alleges that defendant
21 Catalyst Health Ventures, LP is a Massachusetts Limited Partnership with a place of business at
22 50 Braintree Hill Office Park Suite 301 Braintree, MA 02184, whose agent for service is The
23 Corporation Trust Company, Corporation Trust Center, 1209 Orange St. Wilmington, DE 19801,
24 and is a former shareholder of nVision whose shares were acquired by Boston Scientific
25 Corporation, 90% of the initial consideration for which was paid in cash and 10% held in escrow,
26 and additional consideration for which shares is subject to an earn-out based on nVision's
27 performance.

28 10. BioCardia is informed and believes and on that basis alleges that defendant CHV

1 Investments, LLC is a Massachusetts Limited Liability Company with a place of business at 50
2 Braintree Hill Office Park Suite 301 Braintree, MA 02184, whose agent for service is The
3 Corporation Trust Company, Corporation Trust Center, 1209 Orange St. Wilmington, DE 19801,
4 and is a former shareholder of nVision whose shares were acquired by Boston Scientific
5 Corporation, 90% of the initial consideration for which was paid in cash and 10% held in escrow,
6 and additional consideration for which shares is subject to an earn-out based on nVision's
7 performance.

8 11. BioCardia is informed and believes and on that basis alleges that defendant CHV
9 Partners Fund III, L.P. is a Massachusetts Limited Partnership with a place of business at 50
10 Braintree Hill Office Park Suite 301 Braintree, MA 02184, whose agent for service is The
11 Corporation Trust Company, Corporation Trust Center, 1209 Orange St. Wilmington, DE 19801,
12 and is a former shareholder of nVision whose shares were acquired by Boston Scientific
13 Corporation, 90% of the initial consideration for which was paid in cash and 10% held in escrow,
14 and additional consideration for which shares is subject to an earn-out based on nVision's
15 performance.

16 12. BioCardia is informed and believes and on that basis alleges that defendant CHV-
17 E Partners III, L.P. is a Massachusetts Limited Partnership with a place of business at 50
18 Braintree Hill Office Park Suite 301 Braintree, MA 02184, whose agent for service is The
19 Corporation Trust Company, Corporation Trust Center, 1209 Orange St. Wilmington, DE 19801,
20 and is a former shareholder of nVision whose shares were acquired by Boston Scientific
21 Corporation, 90% of the initial consideration for which was paid in cash and 10% held in escrow,
22 and additional consideration for which shares is subject to an earn-out based on nVision's
23 performance.

24 13. BioCardia is informed and believes and on that basis alleges that defendant Draper
25 Associates Investments, LLC is a California Limited Liability Company with a place of business
26 at 55 East Third Avenue, San Mateo, CA 94401, whose agent for service is Timothy Cook
27 Draper, 55 East Third Avenue, San Mateo, CA 94401, and is a former shareholder of nVision
28 whose shares were acquired by Boston Scientific Corporation, 90% of the initial consideration for

1 which was paid in cash and 10% held in escrow, and additional consideration for which shares is
2 subject to an earn-out based on nVision's performance. In 2016, Draper Associates raised a \$190
3 million fund to invest in technology companies. Draper Associates Investments, LLC is one of
4 many investment vehicles affiliated with Tim Draper, one of the most successful and
5 sophisticated venture capitalist investors in the world. Mr. Draper has over 35 years of
6 experience in investment banking and is known for making several highly successful investments
7 in technological companies like Baidu, Hotmail, Skype, Tesla, SpaceX, AngelList, Solarcity,
8 Ring, Twitter, DocuSign, Coinbase, Robinhood, Ancestry.com, Twitch, Cruise Automation, and
9 Focus Media, among others.

10 14. BioCardia is informed and believes and on that basis alleges that defendant Draper
11 Associates Riskmaster Fund II, LLC is a California Limited Liability Company with a place of
12 business at 55 East Third Avenue, San Mateo, CA 94401, whose agent for service is Timothy
13 Cook Draper, 55 East Third Avenue, San Mateo, CA 94401, and is a former shareholder of
14 nVision whose shares were acquired by Boston Scientific Corporation, 90% of the initial
15 consideration for which was paid in cash and 10% held in escrow, and additional consideration
16 for which shares is subject to an earn-out based on nVision's performance.

17 15. BioCardia is informed and believes and on that basis alleges that defendant Draper
18 Associates Riskmasters Fund III, LLC is a California Limited Liability Company with a place of
19 business at 55 East Third Avenue, San Mateo, CA 94401, whose agent for service is Timothy
20 Cook Draper, 55 East Third Avenue, San Mateo, CA 94401, and is a former shareholder of
21 nVision whose shares were acquired by Boston Scientific Corporation, 90% of the initial
22 consideration for which was paid in cash and 10% held in escrow, and additional consideration
23 for which shares is subject to an earn-out based on nVision's performance.

24 16. BioCardia is informed and believes and on that basis alleges that defendant
25 Excelestar Ventures I, LLC is a Massachusetts Limited Liability Company with a place of
26 business at 1 Elm Square, Andover, MA 01810, whose agent for service is Northwest Registered
27 Agent Service, Inc. 8 The Green, Suite B Dover, DE 19901, and is a former shareholder of
28 nVision whose shares were acquired by Boston Scientific Corporation, 90% of the initial

1 consideration for which was paid in cash and 10% held in escrow, and additional consideration
2 for which shares is subject to an earn-out based on nVision's performance.

3 17. BioCardia is informed and believes and on that basis alleges that defendant
4 eXXclaim Capital Partners I, LP ("eXXclaim") is a Delaware Limited Partnership with a place of
5 business at 26010 Torello Ln., Los Altos, CA 94022, whose agent for service is Anula Jayasurtya
6 26010 Torello Ln., Los Altos, CA 94022, and is a former shareholder of nVision whose shares
7 were acquired by Boston Scientific Corporation, 90% of the initial consideration for which was
8 paid in cash and 10% held in escrow, and additional consideration for which shares is subject to
9 an earn-out based on nVision's performance. BioCardia is informed and believes and on that
10 basis alleges that Anula Jayasuriya founded, and serves as managing director of eXXclaim. On or
11 around December 4, 2010, while Ms. Sarna was still working at BioCardia, Ms. Jayasuriya
12 reached out to Ms. Sarna via her BioCardia email address and introduced Ms. Sarna to Linda
13 Greub. Ms. Sarna then followed up with Ms. Greub to request assistance in conceptualizing a
14 catheter system that was the invention of a provisional patent application Ms. Sarna filed while
15 still working at BioCardia. BioCardia is informed and believes and on that basis alleges that Ms.
16 Jayasuriya knew that BioCardia was a medical device company specializing in catheters.
17 BioCardia is informed and believes and on that basis alleges that eXXclaim, through its affiliation
18 with Ms. Jayasuriya, knew or should have known that the intellectual property that formed the
19 basis of nVision Medical Corporation had been misappropriated by Ms. Sarna.

20 18. BioCardia is informed and believes and on that basis alleges that defendant
21 Fogarty Institute for Innovation is a California Domestic non-profit company with a place of
22 business at 2490 Hospital Dr., Suite 310, Mountain View, CA 94040, whose agent for service is
23 Gaule Kuokka, 2490 Hospital Dr., Suite 310, Mountain View, CA 94040, and is a former
24 shareholder of nVision whose shares were acquired by Boston Scientific Corporation, 90% of the
25 initial consideration for which was paid in cash and 10% held in escrow, and additional
26 consideration for which shares is subject to an earn-out based on nVision's performance.

27 19. BioCardia is informed and believes and on that basis alleges that defendant Golden
28 Seeds nVision Medical, LLC is a Delaware Limited Liability Company with a place of business

1 at 1192 Cherry Ave, San Bruno, CA 94066, whose agent for service is Harvard Business
2 Services, Inc., 16192 Coastal Hwy., Lewes, DE 19958, and is a former shareholder of nVision
3 whose shares were acquired by Boston Scientific Corporation, 90% of the initial consideration for
4 which was paid in cash and 10% held in escrow, and additional consideration for which shares is
5 subject to an earn-out based on nVision's performance.

6 20. BioCardia is informed and believes and on that basis alleges that defendant Life
7 Sciences Angel Investors VIII, L.L.C. is a Delaware Limited Liability Company with a place of
8 business at 1230 Bordeaux Dr., Sunnyvale, CA 94089, whose registered agent is The Corporation
9 Trust Company, Corporation Trust Center, 1209 Orange St., Wilmington, DE 19801, and is a
10 former shareholder of nVision whose shares were acquired by Boston Scientific Corporation,
11 90% of the initial consideration for which was paid in cash and 10% held in escrow, and
12 additional consideration for which shares is subject to an earn-out based on nVision's
13 performance. Founded in 2005, Life Science Angels was ranked the top angel investment group
14 in the U.S. by PR Newswire in 2014. Since 2005, Life Science Angels has invested
15 approximately \$50 million in over forty (40) companies, and these companies have received an
16 additional \$1 billion in follow up funding from venture capital firms and strategics.

17 21. BioCardia is informed and believes and on that basis alleges that defendant
18 LMNVC, LLC ("LMNVC") is a Delaware Limited Liability Company with a place of business at
19 407 E. Laurel Circle, Palm Springs, CA 92262, whose agent for service is Philip Nevinny-Stickel,
20 407 E. Laurel Circle, Palm Springs, CA 92262, and is a former shareholder of nVision whose
21 shares were acquired by Boston Scientific Corporation, 90% of the initial consideration for which
22 was paid in cash and 10% held in escrow, and additional consideration for which shares is subject
23 to an earn-out based on nVision's performance. BioCardia is informed and believes and on that
24 basis alleges that Linda Greub was a partner at LMNVC, LLC from October 2010 to October
25 2018. On or around December 4, 2010, while Ms. Sarna was still working at BioCardia, Anula
26 Jayasuriya reached out to Ms. Sarna via her BioCardia email address and introduced Ms. Sarna to
27 Ms. Greub. Ms. Sarna then followed up with Ms. Greub to request assistance in conceptualizing
28 a catheter system that was the invention of a provisional patent application Ms. Sarna filed while

1 still working at BioCardia. BioCardia is informed and believes and on that basis alleges that Ms.
2 Greub knew that BioCardia was a medical device company specializing in catheters. BioCardia
3 is informed and believes and on that basis alleges that LMNVC through its affiliation with Ms.
4 Greub, knew or should have known that the intellectual property that formed the basis of nVision
5 Medical Corporation had been misappropriated by Ms. Sarna.

6 22. BioCardia is informed and believes and on that basis alleges that defendant Seraph
7 nVision, LLC is a Georgia Limited Liability company with a place of business at 2011 Lenox
8 Road NE, Atlanta, GA 30306, whose Registered Agent is Tuff Yen 2011 Lenox Road NE,
9 Atlanta, GA 30306, and is a former shareholder of nVision whose shares were acquired by
10 Boston Scientific Corporation, 90% of the initial consideration for which was paid in cash and
11 10% held in escrow, and additional consideration for which shares is subject to an earn-out based
12 on nVision's performance. Seraph nVision has ten (10) funds with over 330 investors. Seraph
13 nVision has been investing in companies for fifteen (15) years and has closed 106 deals with 21
14 exits. Seraph nVision's minimum investment amount is \$250,000.

15 23. BioCardia is informed and believes and on that basis alleges that the
16 aforementioned Shareholder Defendants have best practices and standard operating procedures to
17 perform "due diligence" by which they gather background information on startups seeking
18 funding. BioCardia is informed and believes and on that basis alleges that the Shareholder
19 Defendants are sophisticated companies and investors focused on investments in or acquisitions
20 of early-stage companies (each an "Investment Target") and, thus, are familiar with the
21 intellectual property issues that Investment Targets have. These include, among other things, that
22 a former employer of a founder of an Investment Target might have a claim to ownership of the
23 inventions claimed by the Investment Target, or that the inventions claimed by the Investment
24 Target may be based on trade secrets misappropriated from a former employer because, among
25 other things:

- 26 a. They had been contractually assigned by the founder to the founder's former
27 employer;

- 1 b. They were co-invented with an employee or employees of the founder's former
2 employer; or
3 c. They were based on information learned at and/or belonging to the former employer.

4 **JURISDICTION AND VENUE**

5 24. BioCardia's complaint arises under the patent laws of the United States, 35 U.S.C.
6 §§ 101 et seq., specifically 35 U.S.C. § 256, the Defend Trade Secrets Act, 18 U.S.C. § 1836, and
7 the laws of the State of California.

8 25. This Court has subject matter jurisdiction over BioCardia's patent law claims
9 under 28 U.S.C. §§ 1331 and 1338(a), jurisdiction over BioCardia's Defend Trade Secrets Act
10 claim under 28 U.S.C. § 1331 and has supplemental jurisdiction over BioCardia's state law
11 claims under 28 U.S.C. § 1367.

12 26. This Court has general personal jurisdiction over Defendants because the acts out
13 of which this Action arises took place within this District.

14 27. Venue is proper in this District under 28 U.S.C. §§ 1391 and 1400.

15 **INTRADISTRICT ASSIGNMENTS**

16 28. Pursuant to Local Rule 3-2 (c), this case involves intellectual property rights and is
17 subject to assignment on a district wide basis.

18 **FACTUAL BACKGROUND**

19 ***Ms. Sarna's Education and Prior Work Experience***

20 29. BioCardia is informed and believes and on that basis alleges that Ms. Sarna's
21 undergraduate major was molecular and cellular biology and that she does not have any graduate
22 degrees.

23 30. Ms. Sarna's work at BioCardia dealt with tracking device failures, ensuring label
24 compliance, and obtaining materials from vendors. While at BioCardia, Ms. Sarna's work
25 responsibilities did not include designing or developing medical devices.

26 31. BioCardia is informed and believes and on that basis alleges that Ms. Sarna's only
27 other experience in the medical device space involved similar tasks as the ones she performed at
28 BioCardia. Ms. Sarna's age, education, and work experience were highly unusual for someone

1 who allegedly came up with a medical device and technique so revolutionary that a company like
2 Boston Scientific Corporation would value it at hundreds of millions of dollars;

3 ***Ms. Sarna's Employment Agreement with BioCardia***

4 32. The facts and claims at issue in this case begin with Surbhi Sarna's employment
5 with Defendant BioCardia, Inc. Ms. Sarna started consulting with BioCardia on September 15,
6 2008 pursuant to a Consulting Agreement executed on August 27, 2008. On November 3, 2008,
7 Ms. Sarna started working as a full-time employee of BioCardia pursuant to the BioCardia
8 standard Employment Agreement which she signed on October 29 (the "Sarna Agreement"). A
9 true and correct copy of the Sarna Agreement with Ms. Sarna's signature is attached hereto as

10 **Exhibit A.**

11 33. In Section 2(a) of the Sarna Agreement, Ms. Sarna agreed "at all times during the
12 term of my employment and thereafter, to hold in the strictest confidence, and not to use, except
13 for the benefit of [BioCardia], or to disclose to any person, firm or corporation without written
14 authorization of the Board of Directors of the Company, any Confidential Information of
15 [BioCardia]." Ms. Sarna also agreed that "Confidential Information" meant any BioCardia
16 "proprietary information, technical data, trade secrets or know-how, including, but not limited to,
17 research, product plans, products, services, customer lists and customers (including, but not
18 limited to, customers of [BioCardia] on whom I called or with whom I became acquainted during
19 the term of my employment), markets, software, developments, inventions, processes, formulas,
20 technology, designs, drawings, engineering hardware configuration information, marketing,
21 finances or other business information disclosed to me by [BioCardia] either directly or indirectly
22 ***in writing, orally or by drawings or observation of parts or equipment.***" (Emphasis added.)

23 34. In section 3(a) of the Sarna Agreement, Ms. Sarna agreed to complete Exhibit A,
24 which was to contain a complete description of all inventions, original works of authorship,
25 developments, improvements, and trade secrets which were made by her prior to her employment
26 at BioCardia. Ms. Sarna executed Exhibit A and did not identify any inventions, original works
27 of authorship, developments, improvements, and trade secrets which were made by her prior to
28 her employment at BioCardia. Ms. Sarna also explicitly stated that she had "No inventions or

improvements” to identify.

EXHIBIT A

LIST OF PRIOR INVENTIONS
AND ORIGINAL WORKS OF AUTHORSHIP

Title	Date	Identifying Number or Brief Description

☒ No inventions or improvements
☐ Additional Sheets Attached

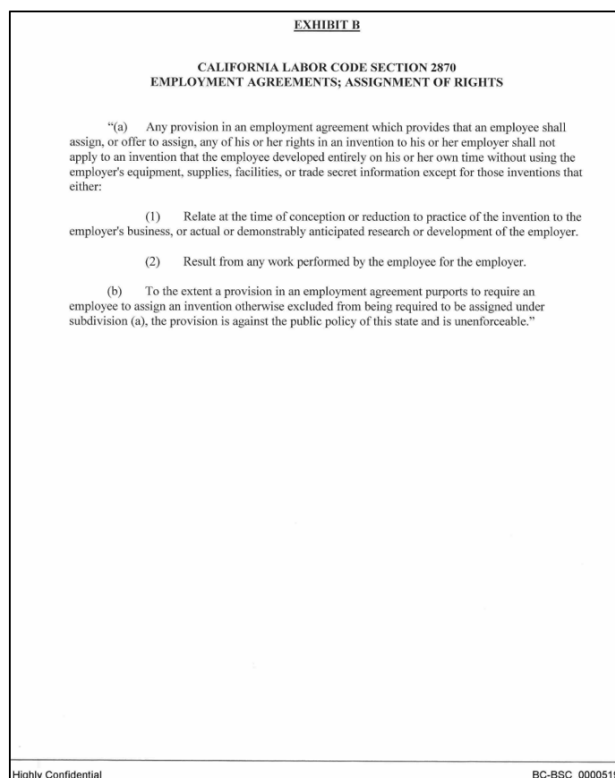
Signature of Employee: [Signature]
 Print Name of Employee: Surbhi Sarna
 Date: 10/29/2020

Highly Confidential BC-BSC_0000518

35. Ms. Sarna agreed in Section 3(b) of the Sarna Agreement to “promptly make full written disclosure to the Company . . . and hereby assign to [BioCardia], or its designee, all my right, title and interest in and to any and all inventions, original works of authorship, developments, concepts, improvements or trade secrets” Ms. Sarna conceived of, developed or reduced to practice during the time period Ms. Sarna was a BioCardia employee. Ms. Sarna never disclosed, in writing or in any other form, any inventions, original works of authorship, developments, concepts, improvements or trade secrets, that she conceived of, developed, or reduced to practice during her employment at BioCardia. The first time BioCardia heard of any of these patents or applications was in January 2019, when it became aware of, and began investigating the extent of, Ms. Sarna’s misappropriation of BioCardia’s intellectual property.

36. The only exception to Ms. Sarna’s contractual duty to assign inventions to BioCardia in Section 3(b) of the Sarna Agreement was provided by Section 3(f), which stated “the provisions of this Agreement requiring assignment of Inventions to [BioCardia] do not apply to any invention which qualifies fully under the provisions of California Labor Code Section

2870” (“Section 2870”). Exhibit B to the Sarna Agreement sets out Section 2870 as follows:



Section 2870 does not apply to the intellectual property Ms. Sarna developed during her employment at BioCardia because (a) she used BioCardia resources as part of the development including, but not limited to, BioCardia trade secret information, BioCardia testing equipment, BioCardia computers, BioCardia’s email system, and time she spent during normal business hours developing the intellectual property; and (b) as explained in the sections describing “BioCardia’s Business Activities” and the “Meeting Between Dr. Altman and Sarna,” the intellectual property Ms. Sarna developed during her BioCardia employment related to BioCardia’s business and to an actual or demonstrably anticipated research and development by BioCardia. BioCardia engaged in extensive efforts to develop Dr. Peter Altman’s ideas relating to women’s pelvic health, including, but not limited to, conducting extensive discussions with several doctors about developing this technology, creating products like the Morph and Helix catheters that could be adapted to be used to address women’s pelvic health issues, obtaining several patents that explicitly indicate they relate to women’s pelvic health, and attempting to get Ms. Sarna to further develop the technology Dr. Altman disclosed to her into additional

1 BioCardia product offerings. Dr. Altman's conversations with doctors and with Ms. Sarna reflect
2 "actual and demonstrably anticipated research or development" of BioCardia.

3 37. Under Section 3(f) of the Sarna Agreement, Ms. Sarna agreed to "advise
4 [BioCardia] promptly in writing of any inventions that I believe meet the criteria in California
5 Labor Code Section 2870 and not otherwise disclosed in Exhibit A." As noted above, Ms. Sarna
6 did not disclose any inventions in Exhibit A to the Sarna Agreement. Ms. Sarna also never
7 disclosed, in writing or any other form, any inventions she believed fell under Section 2870.

8 38. Ms. Sarna also agreed, in Section 3(d) of the Sarna Agreement, to "keep and
9 maintain adequate and current written records of all Inventions made by me (solely or jointly with
10 others) during the term of my employment with the [BioCardia]." Ms. Sarna agreed that "the
11 records will be in the form of notes, sketches, drawings and any other format that may be
12 specified by [BioCardia]" and "will be available to and remain the sole property of [BioCardia] at
13 all times." Ms. Sarna did not maintain the information set out in Section 3(d) for the inventions
14 she made during the term of her employment with BioCardia. Furthermore, Ms. Sarna did not
15 make adequate and current written records of the inventions she made during her BioCardia
16 employment available to BioCardia despite numerous requests for these materials.

17 39. In Section 3(e) of the Sarna Agreement, Ms. Sarna agreed to "assist [BioCardia],
18 or its designee, at [BioCardia's] expense, in every proper way to secure [BioCardia's] rights in
19 the Inventions and any copyrights, patents, mask work rights or other intellectual property rights
20 relating thereto in any and all countries, including the disclosure to [BioCardia] of all pertinent
21 information and data with respect thereto, the execution of all applications, specifications, oaths,
22 assignments and all other instruments which [BioCardia] deems necessary in order to apply for
23 and obtain such rights and in order to assign and convey to [BioCardia], its successors, assigns,
24 and nominees the sole and exclusive rights, title and interest in and to such Invention." Ms. Sarna
25 further agreed that her "obligation to execute or cause to be executed, when it is in my power to
26 do so, any such instrument or papers shall continue after the termination of this Agreement." Ms.
27 Sarna never assisted BioCardia to secure the rights in the inventions, copyrights, patents, mask
28 work rights or other intellectual property rights she developed during her employment at

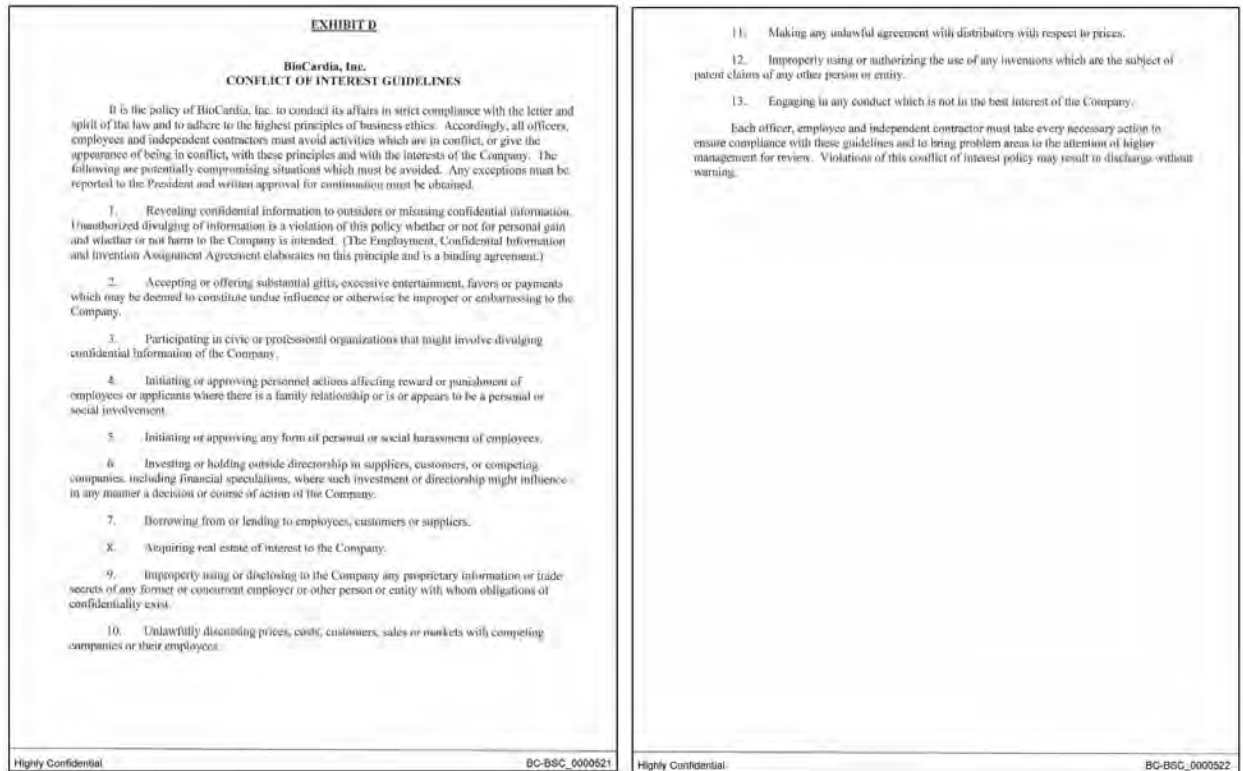
1 BioCardia.

2 40. Under Section 4(a) of the Sarna Agreement, Ms. Sarna agreed that during her
3 employment with BioCardia she would not “engage in any other employment, occupation,
4 consulting or other business activity directly related to the business in which [BioCardia] is now
5 involved or becomes involved during the term of [Ms. Sarna’s] employment.” Nonetheless, Ms.
6 Sarna founded nVision and worked as an employee and/or consultant of nVision while she was
7 still employed by BioCardia. During her employment at BioCardia, Ms. Sarna devoted
8 significant time and effort to nVision, often at the expense of her work for BioCardia, which
9 nVision work was directly related to the business of BioCardia and was based on BioCardia
10 confidential information disclosed by Dr. Peter Altman to her so that she would use that
11 information for the benefit of BioCardia.

12 41. Section 4(b) of the Sarna Agreement required Ms. Sarna, during the term of her
13 employment with BioCardia, to “not accept or perform any outside consulting work without first
14 reporting the nature of and proposed time commitment of any such proposed outside consulting
15 work.” Ms. Sarna never informed BioCardia of her work with nVision, nor of the time
16 commitment of this work.

17 42. Ms. Sarna agreed, under Section 5 of the Sarna Agreement, that “at the time of
18 leaving the employ of [BioCardia], I will deliver to [BioCardia] (and will not keep in my
19 possession, recreate or deliver to anyone else) any and all devices, records, data, notes, reports,
20 proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials,
21 equipment, other documents or property, or reproductions of any aforementioned items developed
22 by me pursuant to my employment with [BioCardia] or otherwise belonging to [BioCardia].”
23 Despite this, on at least eleven separate dates Ms. Sarna emailed BioCardia confidential
24 information to her personal Gmail account: (1) April 29, 2009; (2) July 7, 2009; (3) November
25 20, 2009; (4) September 8, 2010; (5) October 24, 2010 (two emails); (6) December 29, 2010; (7)
26 February 14, 2011; (8) March 11, 2011; (9) May 9, 2011; (10) September 8, 2011; and (11)
27 December 19, 2011. Among the BioCardia confidential information were template documents
28 for risk analysis, product specifications, labelling verification, and document change order

procedures.

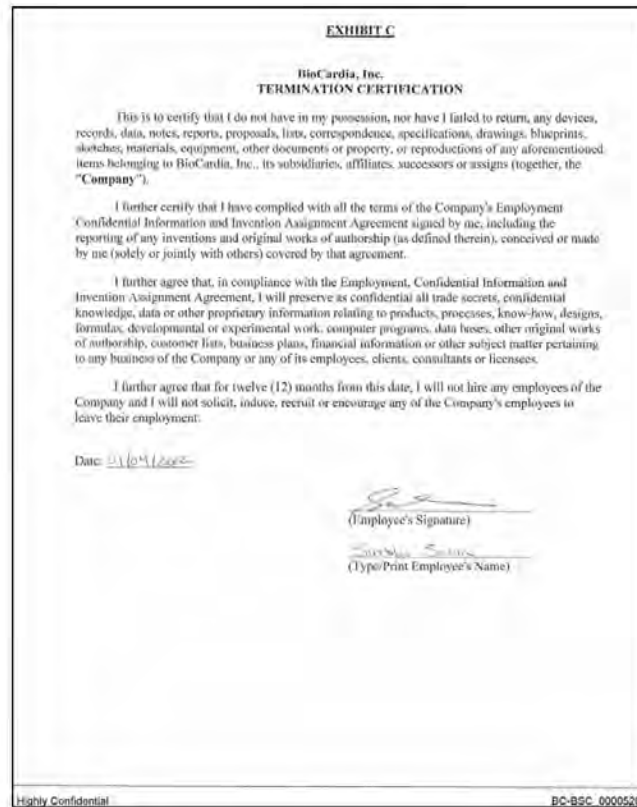


43. In Section 8 of the Sarna Agreement, Ms. Sarna agreed “to diligently adhere to the Conflict of Interest Guidelines attached as Exhibit D” to the agreement. Exhibit D set out several “potentially compromising situations which must be avoided.” Furthermore, “any exceptions must be reported to the President and written approval for continuation must be obtained.” Ms. Sarna never reported any potentially compromising situation to the President of BioCardia, and she never received written approval to engage in any such action.

44. Throughout her employment with BioCardia, Ms. Sarna received periodic reminders of her continuing duty to assign inventions to BioCardia. For example, on at least three occasions, Ms. Sarna received a company-wide email from Gulshan Sharver reminding employees of BioCardia’s inventor incentive program and requesting submission of invention disclosure forms. Ms. Sarna received these emails from Ms. Sharver at least on April 4, 2010; May 27, 2010; and August 24, 2010. Despite these reminders, Ms. Sarna never disclosed any invention to BioCardia during or after her employment at BioCardia.

45. Not only did Ms. Sarna fail to disclose any of the inventions she patented on

1 behalf of nVision, she also affirmatively and falsely represented that she did not have any
 2 inventions to report to BioCardia. Exhibit C to the Sarna Agreement was a “Termination
 3 Certification,” which Ms. Sarna executed on January 4, 2012, the last day she worked for
 4 BioCardia. In this document, Ms. Sarna certified that she “complied with all the terms of the
 5 Company’s Employment Confidential Information and Invention Assignment Agreement signed
 6 by me, including the reporting of any inventions and original works of authorship (as defined
 7 therein), conceived or made by me (solely or jointly with others) covered by that agreement.” At
 8 no point during or after her employment with BioCardia did Ms. Sarna identify any inventions
 9 she made during the time when she was a BioCardia employee.



24 46. Ms. Sarna’s Termination Certification also represented that she did not have in her
 25 possession, nor had she failed to return, “any devices, records, data, notes, reports, proposals,
 26 lists, correspondence, specifications, drawings, blueprints, sketches, materials, equipment, other
 27 documents or property, or reproductions of any aforementioned items bellowing to BioCardia.”
 28 Ms. Sarna made this representation despite that barely two weeks earlier she forwarded an email

1 to her personal Gmail account attaching a BioCardia template for a verification test plan for the
2 Helix catheter. BioCardia is informed and believes and on that basis alleges that corresponding
3 nVision documents adopt the structure, format, and even language of this BioCardia template.

4 47. Ms. Sarna's Termination Certification also represented that she "will preserve as
5 confidential all trade secrets, confidential knowledge, data or other proprietary information
6 relating to products, processes, know-how, designs, formulas, developmental or experimental
7 work, computer programs, data bases, other original works of authorship, customer lists, business
8 plans, financial information or other subject matter pertaining to any business of" BioCardia.

9 ***BioCardia's Business Activities***

10 48. BioCardia's product portfolio and marketing efforts focus on the use of its
11 diagnostic strategies, biotherapeutics, and catheter technologies like its Morph and Helix
12 products. The intellectual property Ms. Sarna claimed as her own and assigned to nVision and
13 the products that Ms. Sarna and nVision developed based on that intellectual property, all relate to
14 catheter products. As a result, Ms. Sarna's patents, and patent applications, and alleged
15 inventions, all relate to BioCardia's "business" as that term is used in California Labor Code
16 Section 2870. Contrary to Ms. Sarna's, Boston Scientific Corporation's, and Boston Scientific
17 Scimed's allegations, the relevant business for purposes of Section 2870 is catheter medical
18 devices, not women's pelvic health.

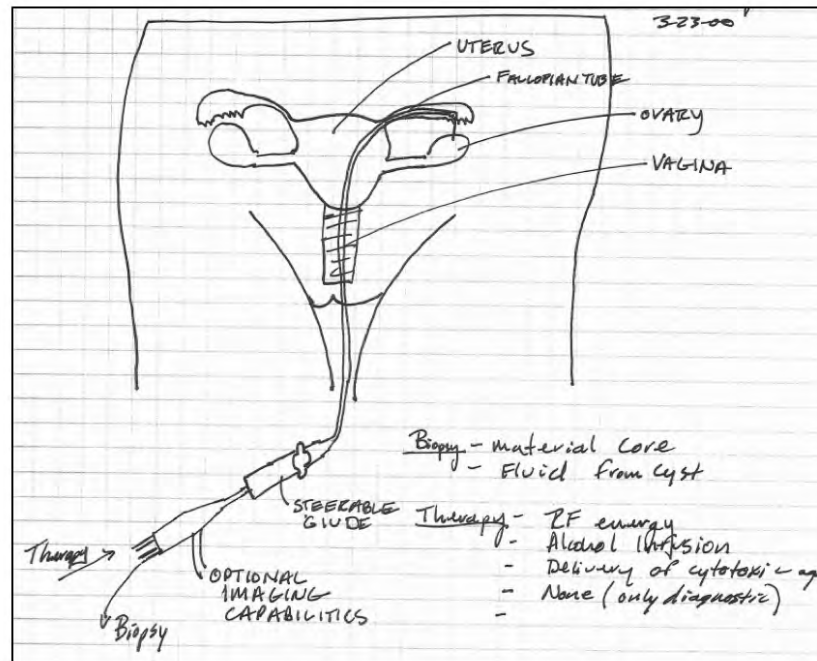
19 49. Regardless, BioCardia also has devoted considerable resources and effort to the
20 treatment of other conditions, including women's pelvic health issues. The treatment of women's
21 pelvic health conditions is a part of BioCardia's "business" and "actual and demonstrable
22 research or development" (as those terms are used in California Labor Code Section 2870).

23 50. Almost from its inception, BioCardia investigated whether the catheter technology
24 it was developing could be used to treat gynecological conditions. Dr. Simon Stertz, one of the
25 most renowned cardiologists in the world, has continuously served as a consultant for BioCardia
26 and its predecessor from 1999 to the present. Among his many accomplishments, Dr. Stertz
27 pioneered interventional cardiology in the 1970s, performed the first angioplasty, founded
28 Arterial Vascular Engineering (which he later sold to Medtronic for nearly \$5 billion), and

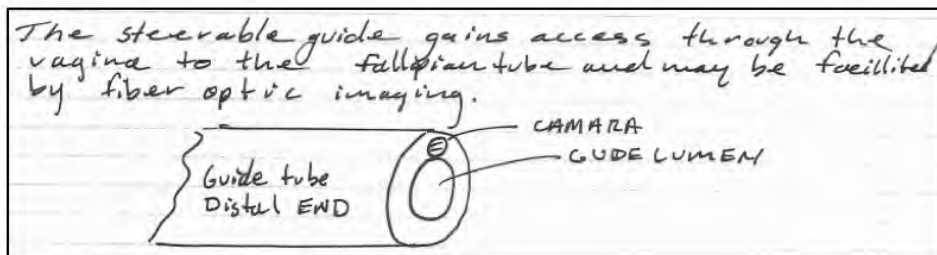
1 currently is a Professor Emeritus at Stanford University. In the years following his
2 groundbreaking work, Dr. Stertzer observed several doctors adapting the devices and procedures
3 he developed for the heart for other parts of the body. Recognizing the enormous business
4 opportunity this presented, Dr. Stertzer began searching for opportunities to develop BioCardia
5 cardiovascular applications for other parts of the body.

6 51. That is why in March 2000, Dr. Stertzer called Dr. Peter Altman, the CEO of
7 BioCardia, to discuss the possibility of adapting BioCardia's catheter offerings for gynecological
8 applications. Dr. Stertzer believed that there was a need to improve the ability to diagnose pre-
9 cancerous and cancerous cysts in a less invasive fashion, as well as new ways to treat them. At
10 the time, the only way to test for ovarian cancer was to perform surgery or an invasive
11 transcutaneous or transvaginal biopsy, which were, burdensome for the patient, and carry a host
12 of risks. In Dr. Stertzer's opinion, BioCardia's Helix and Morph catheter technologies and
13 interactive design enabled sufficient control and flexibility to navigate fallopian tubes and
14 contribute to providing this less invasive diagnosis.

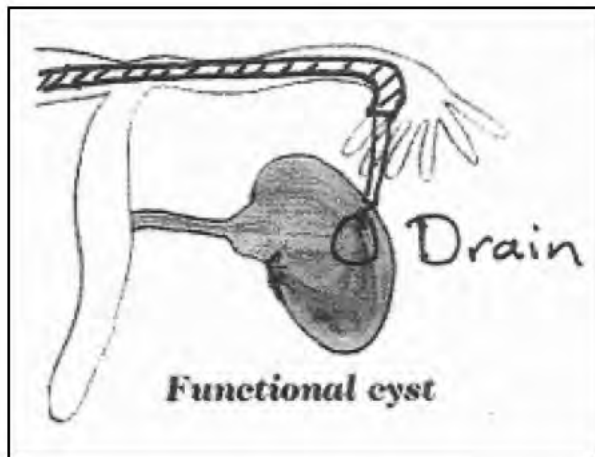
15 52. Dr. Altman, intrigued by the idea, recorded Dr. Stertzer's idea as the first
16 paragraph of a March 23, 2000 lab notebook entry ("the lab notebook disclosure"). In the
17 following pages of the entry, Dr. Altman set out the details of how the Helix and Morph catheters
18 could be adapted for gynecological applications. As depicted in the images in the lab notebook
19 disclosure, and described in the accompanying text, smaller versions of BioCardia's Morph and
20 Helix steerable catheters could be inserted into a vagina and guided to the fallopian tubes,
21 fimbria, and ovaries. By adding imaging, diagnostic, and treatment capabilities at the distal end
22 of the catheter, practitioners could observe, test, and treat ovarian state.



53. The lab notebook disclosure detailed “optional imaging capabilities,” such as ultrasound technology or a fiber optic camera, to steer the catheter and take images inside the vagina. For example, the notebook notes that “rotating ultrasound probes could be used to guide the catheter to obtain [a] high resolution view of [the] ovarian cyst.” It also notes that “intrafallopian ultrasound” could be used “to determine if further intervention is required.” The notebook also noted that fiber optic imaging could also be used to steer the catheter and capture images within the vagina.



The diagnostic capabilities described in the lab notebook included both “a fluid biopsy probe, such as a hollow helical needle may be rotated into the ovary to obtain a sample of the cyst. Such a probe could also be used to drain the cyst.” The notebook also noted that solid biopsies, such as “material core” samples, could also be obtained by the described catheter device.



54. The lab notebook disclosure also described a variety of treatment capabilities administered at the end of the catheter. For example, the catheter could “be used to deliver RF energy to kill tissue in the cyst, or to deliver alcohol or cytotoxic agents designed to introduce necrosis locally.” In addition, the notebook notes that when the catheter is in position it may be used to advance “therapeutic probes.”

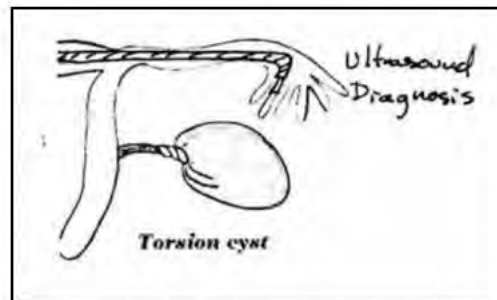
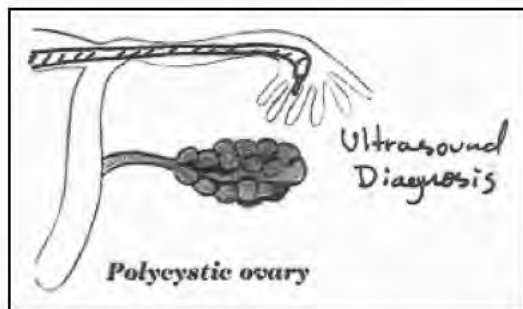
55. In addition to a variety of imaging, biopsy, and treatment capabilities, the lab notebook disclosure also noted different locations where the catheter could collect images, diagnose conditions, and administer treatment. For example, the notebook notes that the catheter can be used for “intrafallopian” diagnosis and treatment:

Dermoid, cystadenoma, endometrial polycystic disease, pre-cancerous and cancerous cysts may be viewed w/ intrafallopian ultrasound to determine if further intervention is required.

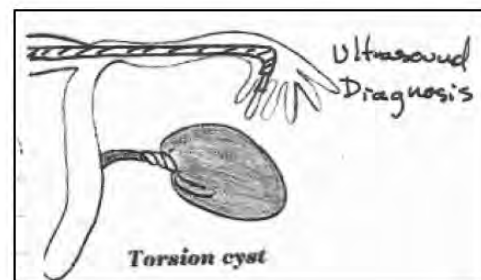
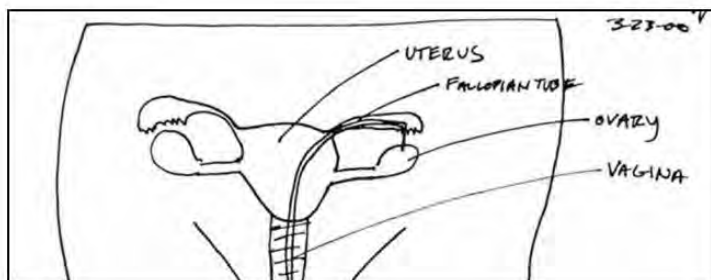
Later, the notebook explains that the catheter can be directed to the fallopian tube, where it can diagnose conditions and administer treatments:

The steerable guide gains access through the vagina to the fallopian tube and may be [facilitated] by fiber optic imaging. The steerable guide once position[ed] may be used to advance imaging probes such as rotating ultrasound transducers, biopsy probes, therapeutic probes, or combinations of these.

The lab notebook also describes advancing the catheter to the fimbria of the fallopian tubes (i.e., the fingerlike structures at the end of the fallopian tube that surround the ovaries).



The March 2000 lab notebook also describes extending past the fimbria to the ovaries for imaging, diagnosis and treatment. For example, rotating ultrasound probes could be used to determine if an ovarian cyst is functional or “another type that requires therapy.” The lab notebook also discusses extending a biopsy probe into the ovary to obtain a sample of a cyst.



56. As Dr. Stertzer suggested, much of the technology BioCardia develops and markets can be adapted for use in the applications disclosed in the lab notebook. Both the Morph and Helix catheters, which BioCardia spent decades developing and refining, are steerable guide catheters like the one described in in the lab notebook. That these catheters are used for cardiovascular treatments does not negate their equal applicability to gynecological treatments. Of course, catheters that are used in the heart would have to be resized and modified before they could be used in smaller anatomical structures like fallopian tubes.

57. BioCardia also devoted significant resources to developing technology that would deliver therapeutic substances for the treatment of cancer at the distal end of a catheter, another feature of the inventions and trade secrets discussed in the March 2000 lab notebook entry. For example, on December 6, 2005, BioCardia filed a patent application for local catheter-based therapy for cancer including delivery of leading blockbuster agents at the distal tip of the catheter. For the next eight years, BioCardia prosecuted this application until it issued as U.S. Patent No.

1 8,529,550 ("the '550 patent") on September 10, 2013. The '550 patent included a claim for:

2 A catheter system comprising: a catheter having a proximal end and a distal end; a
3 drug delivery structure disposed on the distal end of the catheter, where the
4 structure is a hollow structure with one or more apertures communicating from the
5 interior to the exterior of said hollow structure, and a reservoir of a therapeutic
6 agent within said drug delivery structure, said therapeutic agent comprising one of
7 antagonists to angiogenic agents, cytotoxic agents, anti-Her-2, and anti CD20, and
8 tumor necrosis factors; said drug delivery structure being disengageable from the
9 distal end of the catheter; a mechanism at the proximal end of the catheter for
10 disengaging said drug delivery structure from the distal end of the catheter; and a
11 fixation means on said drug delivery structure that may be used within a body of a
12 patient to implant the drug delivery structure to a depth within an intended tissue
13 within the body of a patient

14 58. The day after the '550 patent issued, Dr. Altman reached out to Dr. Manuel
15 Rodriguez, a Vice President at Genentech involved with the commercial development of Avastin,
16 one of the most valuable cancer treatment drugs in the world. In that email, Dr. Altman
17 mentioned that BioCardia had just received the '550 patent, and that this invention together with
18 BioCardia's catheter technology could "enable local delivery of therapeutic agents with ease into
19 the ovary." Dr. Rodriguez responded favorably to this email, and suggested meeting to discuss
20 the following week. In the following weeks Drs. Altman and Rodriguez engaged in several
21 conversations about the possibility of further developing BioCardia technology to deliver
22 therapeutic agents as part of treatments for ovarian cancer.

23 59. The same day that Dr. Altman emailed Dr. Manuel Rodriguez, he sent a nearly
24 identical email to Dr. Ian McNiece, a professor at the University of Texas MD Andersen Cancer
25 Center, the largest cancer center in the United States. Just as with Dr. Rodriguez, this email
26 began an extensive dialogue between Drs. Altman and McNiece about collaborating to further
27 develop BioCardia catheters for gynecological applications. In fact, Dr. McNiece was so
28 intrigued by the possibilities of this collaboration that he invited Dr. Altman to visit him at MD
Andersen for a day-long meeting to discuss this topic. Dr. Altman flew to Texas for this meeting,
and the two had several follow-up discussions about using BioCardia technology in gynecological
applications.

60. BioCardia also engaged in extensive communications with Dr. Camran Nezhat about further adapting BioCardia technology for gynecological applications. Drs. Nezhat and Altman had longstanding communications on this topic from the present all the way back to 2008. In fact, in December 2008, Dr. Stertzer connected Dr. Altman with Dr. Nezhat to begin this development. Dr. Altman reached out to Dr. Nezhat to see if they could “connect on local delivery aspects of [BioCardia’s] business as it relates to OB GYN.” BC-BSC_0385881. Dr. Nezhat’s response was swift and enthusiastic:

From: Camran Nezhat [mailto:cnzhat@stanford.edu]
 Sent: Friday, December 12, 2008 2:45 PM
 To: Peter Altman
 Cc: Simon H. Stertzer; nezhatreception2@yahoo.com
 Subject: Re: BioCardia

Hello Peter,

Thank you for your email.

Simon's suggestion is excellent to use your technology in Reproductive Medicine. It would be a pleasure to meet with you.

I would be happy to make time whenever you are available and you are in the Palo Alto area. Just let me know.

I have copied this to my assistant Erin so she is aware of it. As I might not be in the office when you send your email.

Happy Holidays,

Camran

Camran Nezhat, M.D., F.A.C.O.G., F.A.C.S
 Deputy Chief, Dept. of OB/GYN
 Clinical Professor of Surgery
 Clinical Professor of OBGYN
 Stanford University Medical School
 Stanford University
 Clinical Professor of OB/GYN
 University of California at San Francisco
 Fellowship Director
 Center for Special Minimally Invasive Surgery
 900 Welch Road, Suite 403
 Palo Alto, CA 94304
 650-327-8778
 cnzhat@stanford.edu

Id. Drs. Altman and Nezhat participated in an hour-long meeting the following week and had several follow-up conversations from that meeting. BC-BSC_0385880-81. Dr. Nezhat was so excited about the possibilities BioCardia’s catheters presented in the OB GYN space, that, in January 2009, he attempted to set up a presentation where he and Dr. Altman could discuss the options BioCardia catheters offered with reproductive endocrinologists at Stanford University.

1 **From:** Lori Arnone <nezhatnursing@yahoo.com>
 2 **Sent:** Friday, January 23, 2009 3:33 PM
 3 **To:** Peter Altman <paltman@biocardia.com>
 4 **Subject:** RE: Dr Nezhat

5 Dr. Altman

6 I am still working on getting the Stanford REI doctors information on your product and perhaps trying to get a time
 7 for them to get together with you and Dr. Nezhat for a presentation.

8 Do you have something you can send me via email that is a brief summary of your product that I can include in my
 9 email to them?

10 Thank you

11 Lori Arnone CMA-C, CNA
 12 Clinic Supervisor
 13 Patient Care Manager
 14 Surgical Coordinator

15 Dr. Altman continued to discuss collaboration opportunities in the OB GYN space with Dr.
 16 Nezhat, as evidenced by Dr. Altman's May 2010 invitation for Dr. Nezhat to visit BioCardia:

17 **From:** Peter Altman
 18 **Sent:** Wednesday, May 19, 2010 12:51 PM
 19 **To:** Camran R Nezhat MD.FACOG.FACS. <cnezhat@stanford.edu>
 20 **Subject:** BioCardia

21 Dear Camran,
 22 I would like to extend an invitation for you to visit us at BioCardia and talk about applications of our technologies
 23 in OB/GYN. Andrew Mackenzie is here as VP of OPS and I would invite him to join us. Alternatively, Andy and I
 24 could take you to EVVIA for dinner to discuss.

25 Best regards,
 26 Peter

27 Peter Altman, PhD
 28 President and CEO
 BioCardia, Inc.
 125 Shoreway Rd. Ste B
 San Carlos, CA 94070
 650-226-0121 direct
 650-255-4532 cell
 650-226-0120 main
 650-631-3731 fax
www.biocardia.com

61. BioCardia also engaged in extensive communications with other practitioners
 about adapting BioCardia technology for gynecological applications, including Dr. Mark Lovitch,
 Dr. John Urquhart, and senior management at CareDx.

62. Over the years, BioCardia has spent considerable time and resources on obtaining
 several patents that described applications in the women's pelvic health space based on work that
 was occurring at BioCardia when Ms. Sarna was employed there. For example, BioCardia filed

U.S. Patent Application No. 13/965,807 on August 13, 2013 and prosecuted the application until it issued as U.S. Patent No. 9,078,994 on July 14, 2015. BioCardia also filed U.S. Patent Application No. 13/915,516 on June 11, 2013 and prosecuted the application until it issued as U.S. Patent No. 9,022,977. On August 13, 2013, BioCardia filed U.S. Patent Application No. 13/965,789, which it prosecuted until the application issued as U.S. Patent No. 9,017,284 on April 28, 2015. BioCardia filed U.S. Patent Application No. 13/965,800 on August 13, 2013 and prosecuted the application until it issued as U.S. Patent No. 9,011,373 on April 21, 2015. On July 22, 2008, BioCardia filed U.S. Patent No. 12/177,338, which it prosecuted until the application issued as U.S. Patent No. 8,939,960 on January 27, 2015. BioCardia also filed patent applications which described women's pelvic health applications before Ms. Sarna joined BioCardia. For example, BioCardia filed U.S. Patent Application No. 11/016,448 on December 17, 2004, and prosecuted the application until it issued as U.S. Patent No. 7,402,151 on July 22, 2008. Each of these patents explicitly discusses their application to the field of women's pelvic health, in particular to "uterine fibroid biopsy and ablation." Collectively, these patents alone represent a sustained effort over more than a decade and substantial financial outlay by BioCardia.

BioCardia's Disclosure of Trade Secrets to Ms. Sarna

63. In addition to BioCardia's considerable efforts in the women's pelvic health space, conceiving new methods, developing new catheter-based technology, conferring with several practitioners and companies about the development of women's pelvic health products, and obtaining at least seven patents which described applications in the women's pelvic health space, it also attempted (though unsuccessfully) to get Ms. Sarna to work on these efforts for BioCardia.

64. Ms. Sarna was not a model employee during her time at BioCardia. She was often absent from work, citing a repertoire of excuses that BioCardia is informed and believes and on that basis alleges were often untrue and pretextual to give Ms. Sarna more time to work on her own projects while an employee of BioCardia. She had such difficulty getting to work by 9:00 a.m. that her supervisors modified her work schedule to start at 9:30 a.m. and end at 5:30 p.m. On at least two occasions she was reprimanded in writing for tardiness. Co-workers complained that she would disappear for long stretches during the day, causing delays in projects. Even when

1 Ms. Sarna was at work, she had trouble focusing on the tasks assigned to her and would often
2 make costly mental errors.

3 65. Thinking she needed additional motivation, and knowing of her desire to work on
4 women's health applications, Dr. Altman arranged a meeting with Ms. Sarna, in or around May
5 2009, where he spent well over an hour explaining BioCardia inventions and trade secrets in the
6 hope that she would devote a significant portion of her worktime to further development of these
7 technologies. In particular, Dr. Altman showed Ms. Sarna the March 2000 lab notebook entry,
8 showed her other pages in the lab notebook describing relevant technology, and provided
9 additional trade secrets based on his considerable knowledge and experience with gene
10 expression profiling, all of which was intended to help Ms. Sarna further develop a catheter
11 system for a less invasive method for testing and treating ovarian cancer on behalf of BioCardia.

12 66. During that meeting, Dr. Altman discussed the potential for early diagnostic and
13 local therapy for ovarian cancer with Ms. Sarna because BioCardia anticipated research and
14 development regarding the ovarian diagnostic/therapy approach detailed in the lab notebook.
15 Without early diagnosis, local therapy for the treatment of ovarian cancer is ineffective because of
16 metastasis. This concept underlines why BioCardia's core efforts focused on pre-metastasis
17 diagnostics to identify the disease state.

18 67. BioCardia intended that Ms. Sarna herself was going to participate in that research
19 and development, which is why Dr. Altman disclosed the BioCardia trade secrets to her during
20 the meeting in or around May 2009. That is also why Dr. Altman shared additional laboratory
21 notebook pages with her in the same meeting session relating to the potential ramifications of
22 early diagnosis and the potential for local therapy. The images in the March 2000 lab notebook
23 entry clearly show BioCardia's Morph and Helix products passing through the uterus to be used
24 for fallopian tube procedures. The Morph and Helix were products Ms. Sarna worked on a daily
25 basis, albeit for cardiovascular applications. Further, at least three other employees of
26 BioCardia—including David Snow, David Sanderson, and Andy Mackenzie—were aware that
27 Dr. Altman had spent time with Ms. Sarna proposing that she work on a women's health project.

28 68. During the course of the meeting with Ms. Sarna in or around May 2009, Dr.

1 Altman disclosed dozens of BioCardia inventions and trade secrets through his explanation of the
2 March 2000 lab notebook entry, other pages of the lab notebook, including pages 1-4 of the lab
3 notebook setting out inventive concepts about controlled-release drug delivery matrices, and his
4 explanation of cutting-edge technical developments in gene expression profiling which enabled
5 detection of cancer from the small number of cells collected from a fallopian tube by the catheter.
6 While the list below sets out specific aspects of the inventions and trade secrets that Dr. Altman
7 disclosed to Ms. Sarna, this intellectual property as a whole, and the subject matter discussed
8 during Dr. Altman's meeting with Ms. Sarna, generally describes a method of obtaining a tissue
9 sample from a fallopian tube for determining ovarian state, including:

- 10 a. Diagnostic method of using a catheter inserted into a fallopian tube to obtain a
11 solid or liquid biopsy of potentially diseased ovarian tissue or cells by, for
12 example, advancing a guide catheter into the uterus to gain access to the ostium of
13 a fallopian tube, advancing a second catheter system through the guide catheter
14 and obtaining a sample of tissue through the second catheter that is from the ovary
15 which may be analyzed biologically;
- 16 b. Diagnostic method of inserting a catheter with imaging capability, such as
17 cameras, fiber optics, or ultrasound imaging, on its distal end into a fallopian tube,
18 by, for example, advancing a guide catheter into the uterus to gain access to the
19 ostium of a fallopian tube, advancing a second catheter system through the guide
20 catheter with ultrasound imaging, to enable navigation and sampling for biologic
21 analysis;
- 22 c. Diagnostic method of inserting a catheter with imaging capability, such as
23 cameras, fiber optics, or ultrasound imaging, on its distal end into a fallopian tube
24 by, for example, advancing a guide catheter into the uterus to gain access to the
25 ostium of a fallopian tube, advancing a second catheter system through the guide
26 catheter with imaging capabilities to enable navigation and sampling for biologic
27 analysis;
- 28 d. Diagnostic method of inserting a catheter with imaging capability, such as

1 cameras, fiber optics, or ultrasound imaging, on its distal end into a fallopian tube
2 by, for example, advancing a guide catheter into the uterus to gain access to the
3 ostium of a fallopian tube, advancing a second catheter system through the guide
4 catheter, using the imaging capabilities to enable navigation and imaging of
5 ovarian cysts or tumors;

- 6 e. Diagnostic method of inserting a catheter with imaging capability, such as
7 cameras, fiber optics, or ultrasound imaging, on its distal end into a fallopian tube,
8 by, for example, advancing a guide catheter into the uterus to gain access to the
9 ostium of a fallopian tube, advancing a second catheter system through the guide
10 catheter, using the imaging capability to enable navigation and imaging of ovarian
11 cysts or tumors;
- 12 f. Diagnostic method of inserting a catheter imaging capability, such as cameras,
13 fiber optics, or ultrasound imaging, on its distal end into a fallopian tube by, for
14 example, advancing a guide catheter into the uterus to gain access to the ostium of
15 a fallopian tube, advancing a second catheter system through the guide catheter
16 with ultrasound imaging, to enable navigation and imaging of an ovarian cyst or
17 tumor, and to take an action selected from the set of (1) characterizing said cyst or
18 said tumor or (2) planning therapeutic intervention of said cysts and said tumors;
- 19 g. Diagnostic method of inserting a catheter imaging capability, such as cameras,
20 fiber optics, or ultrasound imaging, on its distal end into a fallopian tube by, for
21 example, advancing a guide catheter into the uterus to gain access to the ostium of
22 a fallopian tube, advancing a second catheter system through the guide catheter
23 with imaging capability to enable navigation and imaging of ovarian cysts or
24 tumors and to take an action selected from the set of (1) characterizing said cyst or
25 said tumor or (2) planning therapeutic intervention of said cysts and said tumors;
- 26 h. Diagnostic method and devices for advancing a tissue-sampling element to the
27 fallopian tube, fimbria, or ovary to take a solid or fluid tissue sample, by, for
28 example, advancing a guide catheter into the uterus to gain access to the ostium of

1 a fallopian tube, advancing a second catheter system having a tissue-sampling
2 element through the guide catheter and advancing the tissue-sampling element to
3 obtain a liquid or solid sample for biologic analysis;

- 4 i. Diagnostic method and devices to be used for tissue-sampling from the fallopian
5 tube, fimbria, or ovary by taking a solid or fluid tissue sample, by, for example,
6 advancing a guide catheter into the uterus to gain access to the ostium of a
7 fallopian tube, advancing a second catheter system having a penetrating element
8 through the guide catheter and advancing the penetrating element consisting of a
9 hollow helical needle into the fallopian tube, fimbria, or ovary to obtain a liquid or
10 solid sample for biologic analysis;
- 11 j. Diagnostic method and devices to be used for tissue-sampling from the fallopian
12 tube, fimbria, or ovary by taking a solid or fluid tissue sample, by, for example,
13 advancing a guide catheter into the uterus to gain access to the ostium of a
14 fallopian tube, advancing a second catheter system having a tissue-sampling
15 element through the guide catheter and advancing the tissue-sampling element into
16 the fallopian tube, fimbria, or ovary to obtain a liquid or solid sample for biologic
17 analysis;
- 18 k. Therapeutic method of inserting a catheter with imaging capability, such as
19 cameras, fiber optics, or ultrasound imaging, on its distal end into a fallopian tube
20 to advance a therapy, by, for example, advancing a guide catheter into the uterus to
21 gain access to the ostium of a fallopian tube, advancing a second catheter system
22 through the guide catheter with imaging capability, to enable navigation and
23 imaging of an ovarian cyst or tumor, and to take an action selected from the set of
24 (1) ablating regions of the ovary, (2) delivering controlled release drug delivery
25 matrices to relevant tissue in and around the ovary, or (3) draining the tissue mass
26 penetrated by the hollow penetrating element;
- 27 l. Therapeutic method of inserting a catheter with imaging, such as ultrasound
28 imaging, on its distal end into a fallopian tube to advance a therapy, consisting of

1 advancing a guide catheter into the uterus to gain access to the ostium of a
2 fallopian tube, advancing a second catheter system through the guide catheter with
3 ultrasound imaging, to enable navigation and imaging of an ovarian cyst or tumor,
4 and to take an action selected from the set of (1) ablating regions of the ovary
5 using radiofrequency energy or (2) ablating the regions of the ovary by the
6 delivery of alcohol;

- 7 m. Therapeutic method and devices to be used through the vagina, uterus, and
8 fallopian tube to advance a hollow element from a catheter to assist with tissue
9 sampling, where, for example, the hollow element is connected to a fluid conduit
10 within the catheter system that is connected to a reservoir outside of the body;
- 11 n. Therapeutic strategy for identifying precancerous and cancerous growths based on
12 a diagnosis performed from a locally-obtained sample before evidence of
13 metastasis has appeared by, for example, obtaining a local biological sample
14 derived from the ovary or adjacent fluids to determine that the ovary has a
15 significant possibility of having a malignant cancer, and using this information to
16 determine appropriate treatments;
- 17 o. Therapeutic strategy for delivering ablative compounds such as alcohol or ablative
18 energy through a catheter system passed through a vagina, uterus, and fallopian
19 tubes to treat disease or a condition of the ovary in which a penetrating element is
20 advanced into the fallopian tubes, fimbria, or ovary; and
- 21 p. The existence of a market need to improve the ability to diagnose precancerous
22 and cancerous cysts minimally invasively with details on the ramifications for
23 therapy with early diagnosis, and strategies for doing so that align with new
24 biological measurement technologies in gene expression and genetic analysis that
25 enable a small sample to identify the presence of disease, including details on the
26 players in the gene diagnosis space looking at blood (CareDx), solid tumor tissues
27 (Genomic health), and cells sloughing from within a body lumen conduit such as
28 that of a bowel movement which passes through the colon (EXACT Sciences).

1 69. Although Ms. Sarna has admitted that Dr. Altman met with her, at least David
2 Sanderson, Andrew Mackenzie, and David Snow knew that Dr. Altman met with Ms. Sarna to
3 discuss a BioCardia project related to women's health. BioCardia is informed and believes and
4 on that basis alleges that Mr. Sanderson, Mr. Mackenzie, and Mr. Snow will corroborate that this
5 meeting took place.

6 70. BioCardia also disclosed trade secrets to Ms. Sarna through her day-to-day work
7 for the company. In particular, BioCardia internally developed a testing instrument that used a
8 ball and spring assembly to test the internal diameter of catheters. The particulars of this testing
9 device are set out in the 04960-A TSPEC, titled "Ball Fixture, 0.0710" Internal Inspection,"
10 which was produced at BC-BSC_0000379-381. Ms. Sarna used this device as part of her work
11 for BioCardia, and later incorporated the ball-and-spring feature in nVision patents and/or patent
12 applications. In particular, BioCardia shared the following trade secret with Ms. Sarna by
13 allowing her to use the ball-and-spring testing instrument: a catheter system which includes a
14 distal spring element on its end and having a round spherical ball mounted on the spring to avoid
15 damage to the lumen through which it is passed, by, for example, having of a catheter shaft with a
16 hollow lumen, containing a fluid conduit, which passes through a helical metal spring on its distal
17 end attached to a small ball attached to the distal-most end.

18 71. Finally, BioCardia disclosed trade secrets to Ms. Sarna in the form of template
19 documents that Ms. Sarna used as part of her work on behalf of BioCardia. BioCardia strictly
20 controlled access to these documents, and only used them internally. Ms. Sarna forwarded many
21 of these templates to her personal Gmail account. BC-BSC_0002529-44; BC-BSC_0002944-
22 3001; BC-BSC_0011792-802; BC-BSC_0013063-119; BC-BSC_0013557-84; BC-
23 BSC_0013585-600; BC-BSC_0014062-63; BC-BSC_0014176-77; BC-BSC_0014339-40; BC-
24 BSC_0014509-14; BC-BSC_0014798-819; BC-BSC_0015207-238. BioCardia is informed and
25 believes and on that basis alleges that corresponding nVision documents adopt the structure,
26 format, and even language of these BioCardia template documents. In particular, BioCardia
27 shared the following trade secret with Ms. Sarna by allowing her to use BioCardia template
28 documents: BioCardia template documents sent to Ms. Sarna's personal email account,

1 consisting of the following templates: Risk Analysis, Product Specification, Labelling
2 Verification, and Document Change Order procedures.

3 ***Ms. Sarna's Misappropriation of BioCardia Trade Secrets During Her Employment at***
4 ***BioCardia***

5 72. While it turned out that Ms. Sarna did further develop the BioCardia intellectual
6 property Dr. Altman shared with her, she did not do so on behalf of BioCardia.

7 73. On Monday, September 28, 2009, approximately four months after Dr. Altman
8 described to Ms. Sarna the women's pelvic health intellectual property in his lab notebook, Ms.
9 Sarna engaged Pacific Crest Law Partners, LLP. That same day, Pacific Crest Law Partners
10 incorporated nVision Medical Corporation ("nVision") in Delaware on Ms. Sarna's behalf. Ms.
11 Sarna never informed BioCardia that she had formed her own corporation.

12 74. On Tuesday, September 29, 2009, the day after incorporating nVision, Ms. Sarna
13 called in sick. Later that same day, Ms. Sarna filed a provisional patent application in the United
14 States Patent and Trademark Office ("USPTO") that she assigned to nVision in a December 26,
15 2009 Technology Transfer Agreement. Ms. Sarna never informed BioCardia that she filed this
16 provisional patent application. Even when BioCardia finally learned of the provisional patent
17 application in 2020 and requested production of the application and any other related documents
18 as part of discovery in the present litigation, Ms. Sarna did not produce the materials. This is
19 despite Ms. Sarna's promise, in Section 3(d) of the Sarna Agreement, to "keep and maintain
20 adequate and current written records of all Inventions made by me (solely or jointly with others)
21 during the term of my employment with [BioCardia]" and her agreement that "the records will be
22 in the form of notes, sketches, drawings and any other format that may be specified by
23 [BioCardia]" and "will be available to and remain the sole property of [BioCardia] at all times."

24 75. On Tuesday, February 9, 2010, Ms. Sarna took another day off. Later that same
25 day, Ms. Sarna signed an "Action by Sole Director of nVision Medical Corporation," which gave
26 Pacific Crest Law Partners, LLP a warrant to acquire 40,000 shares in exchange for up to \$15,000
27 in legal fees.

28 76. On Friday, December 3, 2010, Ms. Sarna emailed David Snow and Miranda Peto

1 to inform them that she would be working from home. Later that same day, Ms. Sarna emailed
 2 Anula Jayasuriya, then a member of the Board of Trustees of Astia and later the Founder and
 3 Managing Director of eXXclaim Capital, to thank her for an introduction to Linda Greub, then a
 4 partner at LMN Ventures, LLC.¹ The date on the email is “Sat 12/4/2010 12:02:36 AM
 5 Coordinated Universal Time,” which corresponds to 5:02 p.m. on Friday, December 3, 2010.
 6 Because Ms. Sarna could not arrive at work by 9:00 a.m., BioCardia allowed her workday to span
 7 from 9:30 a.m. to 5:30 p.m. Consequently, this email not only was sent using BioCardia’s email
 8 service, but was also sent during Ms. Sarna’s normal working hours. In that same email, Ms.
 9 Sarna also asked Ms. Greub for help “conceptualizing a product which will diagnose fallopian

Sent: Sat 12/4/2010 12:02:36 AM Coordinated Universal Time

Anula,

Thank you for the introduction.

Linda,

Pleasure to e-meet you. I'm currently conceptualizing a product which will diagnose fallopian tube occlusion in the office of the reproductive specialist. I would love to run the idea by you and get your thoughts. I currently work in San Carlos and would be happy to meet you wherever it is most convenient.

Thanks for your time,
 Surbhi
 cell 408.655.3577

This email and any attachments thereto may contain private, confidential, and privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by others is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.

18 tube occlusion in the office of the reproductive specialist.” BioCardia found this email among
 19 Ms. Sarna’s **deleted emails**.

20 77. Although the email references an earlier email introduction to Ms. Greub by Ms.
 21 Jayasuriya, that email is nowhere to be found in Ms. Sarna’s BioCardia email account.

22 78. BioCardia is informed and believes and on that basis alleges that Ms. Sarna
 23 deleted Ms. Jayasuriya’s email introducing Ms. Greub and emptied her deleted email folder to
 24 permanently eliminate that email, but forgot to empty the folder after she deleted her email
 25 requesting assistance from Ms. Greub. These communications with Ms. Jayasuriya and Ms.
 26

27 _____
 28 ¹ eXXClaim Capital and LMN Ventures were both shareholders in nVision and are named
 defendants in this litigation.

1 Greub were not to develop products on BioCardia's behalf. Ms. Sarna never disclosed this
2 product, or any efforts to develop it, to BioCardia.

3 79. BioCardia is informed and believes and based on the foregoing alleges that Ms.
4 Sarna took many steps to actively conceal her use of BioCardia resources to advance nVision,
5 including deleting other emails sent to and from her BioCardia email account relating to nVision.

6 80. On Thursday, January 6, 2011, almost exactly a year *before* Ms. Sarna left
7 BioCardia, she executed the "nVision Medical Corporation Common Stock Purchase
8 Agreement," whereby Anula Jayasuriya purchased 510,640 shares at \$0.001 per share. Ms. Sarna
9 formalized this agreement on Wednesday, January 12, 2011, when she executed an "Action by
10 Sole Director of nVision Medical Corporation" selling the shares to Ms. Jayasuriya.

11 81. On Tuesday, January 25, 2011, a little less than a year before Ms. Sarna left
12 BioCardia, Bedi Harmonhinder filed United States Provisional Patent Application No. 61/435,945
13 ("the '945 provisional application") with the USPTO, naming Ms. Sarna as the sole inventor.
14 The '945 provisional application is almost certainly the subject of Ms. Sarna's December 2010
15 email to Anula Jayasuriya and Linda Greub and any subsequent communications, since both that
16 email and the application discuss "a product which will diagnose fallopian tube occlusion in the
17 office of the reproductive specialist." The '945 provisional application is a very close
18 reproduction of the March 2000 lab notebook entry describing BioCardia's women's pelvic
19 health inventions and trade secrets. Just like the March 2000 lab notebook, the '945 provisional
20 application describes inserting a steerable catheter that has imaging, diagnostic, and treatment
21 capabilities into a vagina. According to the '945 provisional application:

22 Another solution is to use a commercially available guidewire, but to have a catheter that
23 contains both the illumination and imaging fibers within it in addition to the biopsy or
24 injection needles.

25 The provisional application goes on to describe:

26 The invention relates to a novel technology and technique to diagnose, sample and
27 treat occlusions of the fallopian tube and other fallopian tube diseases More
28 specifically, the present invention relates to the fimbria end of the fallopian tube and
facilitates the in-office visual examination of the fallopian tube, further allows
diagnostic procedures such as taking a biopsy, and injection of regional therapy,

such as but not limited to a biotherapeutic.

For the **imaging capabilities**, the '945 provisional application discloses the same fiber optic and ultrasound techniques disclosed in the March 2000 lab notebook:

For the visualization portion of the catheter, several methods are presented including but not limited to using a fiber optics bundle, sound waves such as an ultrasound-related technique, and light scattering techniques, such as optical coherence tomography (OCT).

In addition to imaging capabilities, the '945 provisional application discusses providing **diagnostic** and **treatment capabilities** in the same catheter:

The working lumen of the device provides a passageway for the physician to have guidance through the fallopian tube via guidewire as well as provide access to the tube for biopsy or local therapeutic delivery.

Like the March 2000 lab notebook describing BioCardia's inventions and trade secrets in the women's pelvic health space, the '945 provisional application also describes accessing the fallopian tubes, with particular emphasis on the fimbria surrounding the ovaries. In fact, the title of the '945 provisional application is "A Transvaginal Device and Technique to Access the Fimbria of the Fallopian Tubes Via the Uterotubal Ostium in Order to Both Diagnose and Treat Occlusions and Disease." The application goes on to state that "the present invention relates to the fimbria-end of the fallopian tube."

82. Despite its clear relevance to BioCardia's business, and to the actual and demonstrably anticipated research and development that Dr. Altman wanted Ms. Sarna to perform for BioCardia, Ms. Sarna never informed BioCardia that she filed the '945 provisional application.

83. On August 20, 2011, some five months before leaving BioCardia, Ms. Sarna executed a "Written Consent of the Stockholders of nVision Medical Corporation," which identified Anula Jayasuriya as holding 510,640 shares of common shares and 316,056 seed preferred shares, and LMNVC, LLC (where Linda Greub was a principal) as holding 1,264,223 seed preferred shares.

84. On November 13, 2011, some two months before Ms. Sarna left BioCardia, Kim

1 Rubin filed United States Provisional Patent Application No. 61/559,120 (“the ’120 provisional
2 application”) with the USPTO, naming Ms. Sarna as the sole inventor. Although not as similar to
3 the March 2000 lab notebook as the ’945 provisional application, the ’120 provisional application
4 nevertheless divulged BioCardia inventions and trade secrets. In particular, the ’120 provisional
5 application disclosed a catheter that is inserted into a vagina and directed to the fallopian tube
6 where it is used to take images. Just as with the March 2000 lab notebook, and the ’945
7 provisional application, the ’120 provisional application’s “visualization portion of the catheter
8 include but are not limited to using a fiber optics bundle” and “sound waves such as an
9 ultrasound-related technique, such as Intravascular ultrasound (IVUS).” Also like the March
10 2000 lab notebook and the ’945 provisional application, the ’120 provisional application
11 “invention may be used to access the entire length of the fallopian tube.”

12 85. Despite its clear relevance to BioCardia’s business, and to the actual and
13 demonstrably anticipated research and development that Dr. Altman wanted Ms. Sarna to perform
14 for BioCardia, Ms. Sarna never informed BioCardia that she filed the ’120 provisional
15 application.

16 86. During Ms. Sarna’s employment with BioCardia, she repeatedly sent confidential
17 BioCardia documents to her personal email account, including a testing plan for the Helix
18 steerable catheter sent just a few working days before she resigned from BioCardia. Below is a
19 list of these confidential materials that BioCardia has been able to ascertain to date:

- 20 a. Morph Target Sheath Packaging Verification Protocol (April 29, 2009)
- 21 b. HIC (Helical Infusion Catheter)/UGC (Universal Guide Catheter)
22 Packaging Procedure (April 29, 2009)
- 23 c. Pouch Seal Operational Qualification (April 29, 2009)
- 24 d. Morph AccessPro Risk Management Plan & Report (July 7, 2009)
- 25 e. Morph AccessPro Risk Management Plan & Report (longer version) (July
26 7, 2009)
- 27 f. Morph Access Pro Risk Analysis Worksheet (July 7, 2009)
- 28 g. Morph Target Sheath Verification Matrix (July 7, 2009)

- h. Morph Target Sheath Risk Management & Report (July 7, 2009)
- i. BioCardia Engineering Change Order Form (November 20, 2009)
- j. Morph 895 (AD) Catheter Label Verification Protocol (November 20, 2009)
- k. Helical Infusion Catheter 953 Label Verification Protocol (November 20, 2009)
- l. Dekra review of “technical file for the CE marking of the system comprising of Helical Infusion Catheter and Universal Deflectable Guide Catheter” (September 8, 2010)
- m. Generic BioCardia quality assurance procedure for risk management (October 24, 2010)
- n. A presentation analyzing complaints against BioCardia’s Morph catheter and explaining BioCardia’s response to these complaints (October 24, 2010)
- o. “Complaint 0070 – Summary of Initial Observations of 6F Morph Device” (October 24, 2010)
- p. “02364-A (DH) Essential Requirements UGC [Universal Guide Catheter]” (December 29, 2010)
- q. Spreadsheet tracking failures and responses for BioCardia catheter (February 14, 2011)
- r. “02045-B (REG) Essential Requirements HIC [Helical Infusion Catheter]” (March 11, 2011)
- s. Generic BioCardia Labeling Verification Procedure (May 9, 2011)
- t. “Long HIC [Helical Infusion Catheter] risk analysis” (September 8, 2011)
- u. “Helical Infusion Catheter Risk Management Plan & Report” (September 8, 2011)
- v. “Verification Test Plan for Helix Model 02772” (December 19, 2011)

87. On January 4, 2012, Ms. Sarna ended her employment with BioCardia and

1 executed the BioCardia, Inc. Termination Certification, where she: (1) indicated that she had not
2 retained any BioCardia materials; (2) certified that she had complied with BioCardia's invention
3 assignment agreement, including "reporting of any inventions" she conceived; and (3) agreed to
4 preserve all BioCardia trade secrets, confidential knowledge, proprietary information, products,
5 processes, know-how, designs, and developmental or experimental work, among other things.

6 88. BioCardia is informed and believes and on that basis alleges that at the time of her
7 departure, Ms. Sarna retained all the materials identified in paragraph 85 of this complaint and
8 used some or all of those documents for the benefit of nVision.

9 89. At no time did Ms. Sarna inform BioCardia that she had filed several patent
10 applications, and Ms. Sarna did not assign those applications to BioCardia but instead to nVision.

11 90. By the time of her departure, but unbeknownst to BioCardia, Ms. Sarna had
12 misappropriated BioCardia trade secrets, confidential knowledge, proprietary information,
13 products, processes, know-how, designs, and developmental or experimental work for the benefit
14 of nVision and nVision's future assigns.

15 91. At no time prior to her departure from BioCardia did Ms. Sarna inform BioCardia
16 that she had already incorporated a competing medical device company to develop steerable
17 catheters similar to BioCardia's Helix and Morph catheters, or that she had engaged in significant
18 rounds of funding for this competing business.

19 ***Ms. Sarna's Misappropriation of BioCardia Trade Secrets Upon Leaving BioCardia***

20 92. After Ms. Sarna left BioCardia, she continued to file patent applications covering
21 BioCardia's confidential intellectual property, and developed catheter products similar to
22 BioCardia's Morph and Helix catheters for gynecological applications.

23 93. After leaving BioCardia, Ms. Sarna filed several domestic and foreign patent
24 applications that claimed priority to the '945 provisional application (collectively referred to as
25 "the '945 Provisional Application Family") and which were based on the intellectual property
26 described in Dr. Altman's March 2000 lab notebook and disclosed to Ms. Sarna by Dr. Altman
27 during their meeting in or around May 2009, including but not limited to: PCT/US Patent
28 Application No. 12/022,619 (filed January 25, 2012), which was published as WO 2012/103,266

(August 2, 2012); U.S. Patent Application No. 13/979,691 (filed January 25, 2012), which was published as 2013/0296686 (Nov. 7, 2013)); U.S. Patent No. 9,173,571; U.S. Patent Application No. 14/929,989 (filed November 2, 2015), which was published as 2016/0151011 (June 2, 2016)); U.S. Patent No. 10,610,149; U.S. Patent Application No. 15/605,407 (filed May 27, 2017), which was published as 2017/0258392 (Sept. 14, 2017)); U.S. Patent Application No. 16/813,117 (filed March 9, 2020), which was published as 2020/0205722 (July 2, 2020); and several foreign counterparts. By claiming priority to the '945 provisional application, the members of the '945 Provisional Application Family all incorporate BioCardia inventions and trade secrets and all should have been assigned to BioCardia.

94. Ms. Sarna also filed additional patent applications that claimed priority to the '120 provisional application (collectively referred to as "the '120 Provisional Application Family"), including but not limited to: PCT/US Patent Application No. 12/064,834 (filed November 13, 2012), which was published as WO 2013/071293 (May 16, 2013); U.S. Patent Application No. 14/357,875 (filed May 13, 2014), which was published as 2014/0323859 (Oct. 30, 2014)); and any foreign counterparts. By their reliance on the '120 provisional application, the members of the '120 Provisional Application Family all incorporate BioCardia inventions and trade secrets and all should have been assigned to BioCardia.

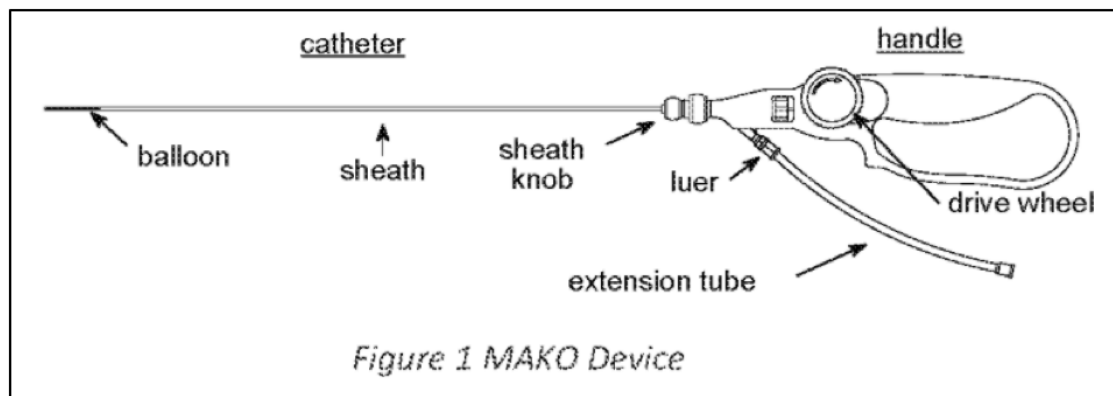
95. In or around 2013, Ms. Sarna began collaborating with Dr. Albert Chin to further refine the inventions and trade secrets she misappropriated from BioCardia. Through her collaboration with Dr. Chin, Ms. Sarna developed an everting balloon catheter as the means of obtaining a biopsy in a fallopian tube. However, the collaboration by Ms. Sarna and Dr. Chin still relied on, and used, BioCardia's inventions and trade secrets in the form of a catheter-based approach to obtain a biological sample from a fallopian tube to determine ovarian state.

96. Ms. Sarna, Dr. Chin, and a few additional nVision employees filed several foreign and domestic patents on the everting balloon refinement. The patent applications that claim priority to PCT/US Patent Application No. 14/014472 (collectively referred to as "the '472 Application Family") include, but are not limited to: U.S. Patent Application No. 14/764,710 (filed July 30, 2015), which was published as 2015/0351729 (December 12, 2015)); U.S. Patent

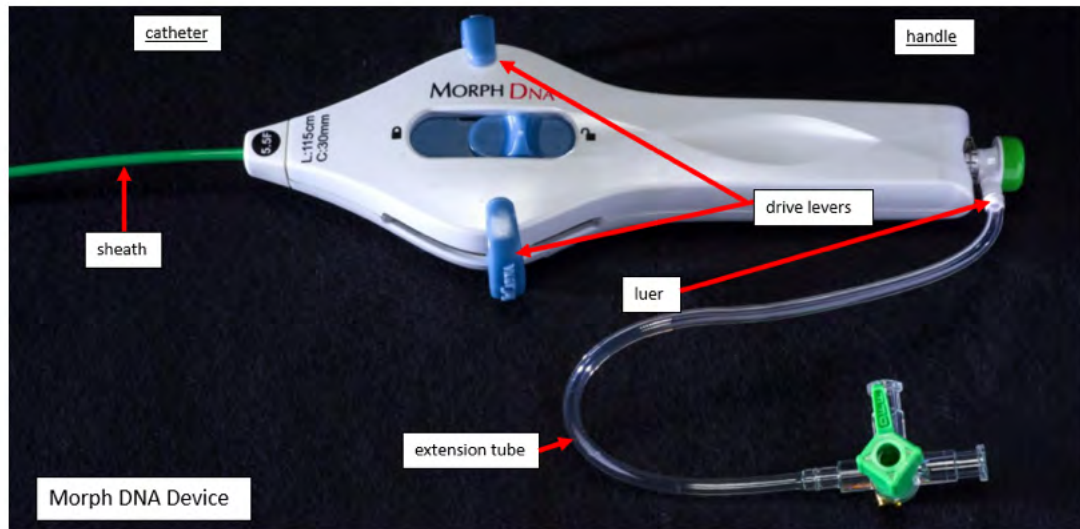
1 No. 10,646,209; U.S. Patent Application No. 15/053,568 (filed February 25, 016), which was
2 published as 2016/0278747 (September 29, 2016); U.S. Patent No. 10,639,016; U.S. Patent
3 Application No. 16/834,507 (filed March 30, 2020), which was published as 2020/045983
4 (August 6, 2020); U.S. Patent Application No. 15/998,501 (filed August 16, 2018), which was
5 published as 2018/0353161 (December 13, 2018); U.S. Patent Application No. 15/998,507 (filed
6 August 16, 2018), which was published as 2019/0000429 (January 3, 2019); U.S. Patent
7 Application No. 16/834,480 (filed March 30, 2020), which was published as 2020/0245981
8 (August 6, 2020); PCT/US Patent Application No. 17/019700 (filed February 27, 2017), which
9 was published as WO 2017/147586 (August 31, 2017); PCT/US Patent Application No.
10 18/000229 (filed August 16, 2018), which was published as WO 2019/040094 (February 28,
11 2019); and several foreign counterparts.

12 97. In addition to the '945 Provisional Patent Family, the '120 Provisional Patent
13 Family, and the '472 Application Family described above, Ms. Sarna and nVision filed several
14 additional United States provisional patent applications, including, but not limited to, a "USPTO
15 provisional patent application filed on or around September 29, 2009" (BSC-BC00003116), U.S.
16 Provisional Patent Application No. 62/546,791 (filed August 17, 2017); U.S. Provisional Patent
17 Application No. 62/578,127 (filed October 27, 2017); U.S. Provisional Patent Application No.
18 62/608,027 (filed December 20, 2017); U.S. Provisional Patent Application No. 62/578,168 (filed
19 October 27, 2017); and U.S. Provisional Patent Application No. 62/599,555 (filed December 15,
20 2017 (collectively "the Additional Provisional Applications"). Production of documents with
21 respect to the Additional Provisional Applications has been virtually non-existent. BioCardia is
22 informed and believes and on that basis alleges that the Additional Provisional Applications were
23 based on the confidential BioCardia intellectual property that Dr. Altman shared with Ms. Sarna
24 on or around May 2009.

98. In addition to her patenting efforts, Ms. Sarna also developed the Mako catheter. Aside from sizing differences, the Mako is very similar to BioCardia's Morph and Helix catheters, both of which Ms. Sarna worked on while at BioCardia. For example, in nVision Medical Corporation's Instructions for Use depict the Mako 7 catheter as "comprised of a catheter and a handle." BSC-BC00004101. The handle includes a "luer," which attaches to an "extension tube" that provides liquid to the Mako device. The handle also includes a "drive wheel," which, when turned by the operator, pushes the liquid provided by the extension tube to the distal end of the catheter where it expands a balloon inside the catheter tip.



BioCardia's Morph catheter, for example, presents a similar visual appearance to, and nearly the same components as, the Mako device. Like the Mako, the Morph is comprised of a catheter and a handle. The Morph handle includes a "luer," which attaches to an "extension tube" that provides liquid, which is delivered to the heart for treatment. The Morph handle includes "drive levers," which, when pulled by the operator, push the liquid treatment provided by the extension tube to the distal end of the catheter where it is delivered to the heart.



99. In addition to her patenting efforts, and the development of the Mako catheter system, Ms. Sarna also misappropriated BioCardia intellectual property from the March 2000 lab notebook entry by disclosing this confidential information to various medical professionals as part of the development process. BioCardia is informed and believes and on that basis alleges that Ms. Sarna divulged confidential BioCardia intellectual property to at least the following individuals to obtain funding for nVision Medical Corporation, and as part of the Mako development and clinical trial process: Anula Jayasuriya; Linda Greub; Jesus Magana; Wendy Heigel; Andrew Cleeland; Dr. Tom Shebab; Arboretum Ventures IV, LP; Astia Angel nVision LLC; Catalyst Health Ventures (PF) L.P.; Catalyst Health Ventures Follow-On Fund, L.P.; Catalyst Health Ventures III, L.P.; Catalyst Health Ventures, LP; CHV Investments, LLC; CHV Partners Fund III, L.P.; CHV-E Partners III, L.P.; Draper Associates Investments, LLC; Draper Associates Riskmaster Fund II, LLC; Draper Associates Riskmasters Fund III, LLC; Excelestar Ventures I, LLC; eXXclaim Capital Partners I, LP; Fogarty Institute for Innovation; Golden Seeds nVision Medical, LLC; Life Sciences Angel Investors VIII, LLC; LMNVC, LLC; Seraph nVision, LLC; Dr. Shamila Pramanik; Dr. Jose Garza Leal; Dr. Sarah H. Kim; Dr. Ronny Drapkin; Dr. Mark Morgan; Dr. Barry Berger; Dr. Paul Billings; Dr. Amy Garcia; Dr. Stephen Grochmal; Dr. Allison Kurian; Dr. Charles Landen; Dr. David Miller; Dr. Bethan Powell; Dr.

Eric Yang; Dr. Elena Gates; Dr. Hector Chapa; Dr. Lynn Marie Westphal; Dr. William Keye; Dr. Viviane Connor; Dr. Jim Tsaltas; Dr. Douglas Hart; Dr. Andrew Brill; Dr. David Miller; Dr. Jonathan Berek; Dr. Frederick St. Goar; and various staff members of the individuals and entities.

BioCardia's First Awareness of Ms. Sarna's Breach of Contract and Misappropriation of Trade Secrets

100. The first time that BioCardia became aware of Ms. Sarna's breach of her employment contract, and misappropriation of BioCardia's confidential information, was in January 2019, after Boston Scientific advised Dr. Altman that it no longer wanted to pursue a business relationship with BioCardia that previously had been under discussion. Surprised by this development and having learned that Boston Scientific had acquired the company Ms. Sarna had founded, Dr. Altman searched the USPTO website to see what Ms. Sarna was working on. It was only after conducting these searches, that Dr. Altman and BioCardia learned that Ms. Sarna had filed the '945 provisional application and the '120 provisional application during her time at BioCardia, and that these applications, and several patents that claimed priority to these applications, were based on the March 2000 lab notebook entry that Dr. Altman described to Ms. Sarna in or around May 2009. Dr. Altman describes the experience of seeing the first patent in 2019 as feeling his "blood run cold" as soon as he saw the area she was working in and how closely it was related to the project he had detailed to her.

101. Prior to January 2019, BioCardia was not aware that Ms. Sarna had founded a competing medical device company that made catheters like BioCardia's Morph and Helix catheters and was not aware that Ms. Sarna had misappropriated BioCardia's intellectual property. Nothing about Ms. Sarna's actions during her employment at BioCardia, or her communications with BioCardia employees after she left BioCardia, would have put BioCardia on notice that she had founded a competing company or misappropriated BioCardia's trade secrets.

102. For example, Ms. Sarna claims that she openly shared her desire to start her own company focused on women's health with her colleagues at BioCardia. Sharing an interest in starting a medical device company with co-workers is not the same as providing notice that this

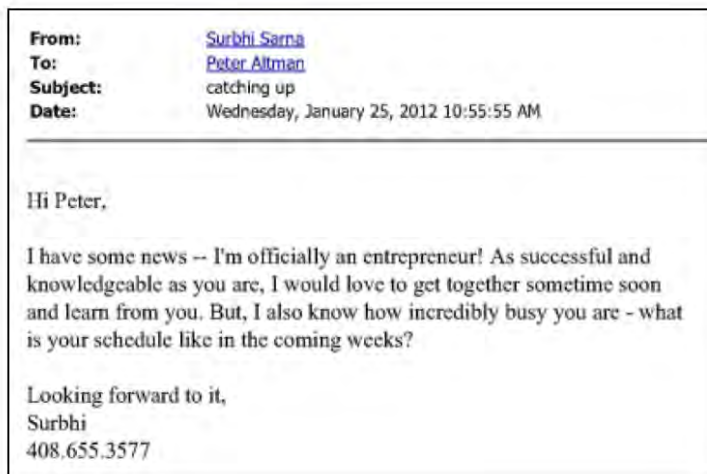
1 company will compete with your co-workers or that you plan to misappropriate company
2 confidential information. While Ms. Sarna may or may not have shared the desire to start a new
3 company, she certainly did not tell BioCardia that this company would compete with BioCardia,
4 that it would misappropriate BioCardia's trade secrets or that it was already founded in 2009
5 while she was a BioCardia employee.

6 103. Ms. Sarna also claimed that Dr. Altman gave her permission to pursue her own
7 women's health projects on her own time and using her own resources, and that this somehow
8 condones her misappropriation of BioCardia technology. This plainly is not true. Dr. Altman
9 never gave Ms. Sarna a blanket permission to start a competing company or to pursue any
10 independent research on women's health. Almost from the beginning of Ms. Sarna's employment
11 at BioCardia, co-workers were concerned about her absences, her lack of focus at work, and her
12 low productivity. The idea that Dr. Altman would have encouraged her to pursue outside
13 research, which only would have exacerbated her poor performance at work, is illogical.

14 104. Ms. Sarna never informed BioCardia, either orally or in writing, that she had filed
15 several provisional patent applications during her BioCardia employment, as required by her
16 employment contract. In fact, when Ms. Sarna executed her "Termination Certification" on her
17 last day at BioCardia, she affirmatively represented that she had complied with BioCardia's
18 Employment Confidential Information and Invention Assignment Agreement and did not have
19 any patent applications to report.

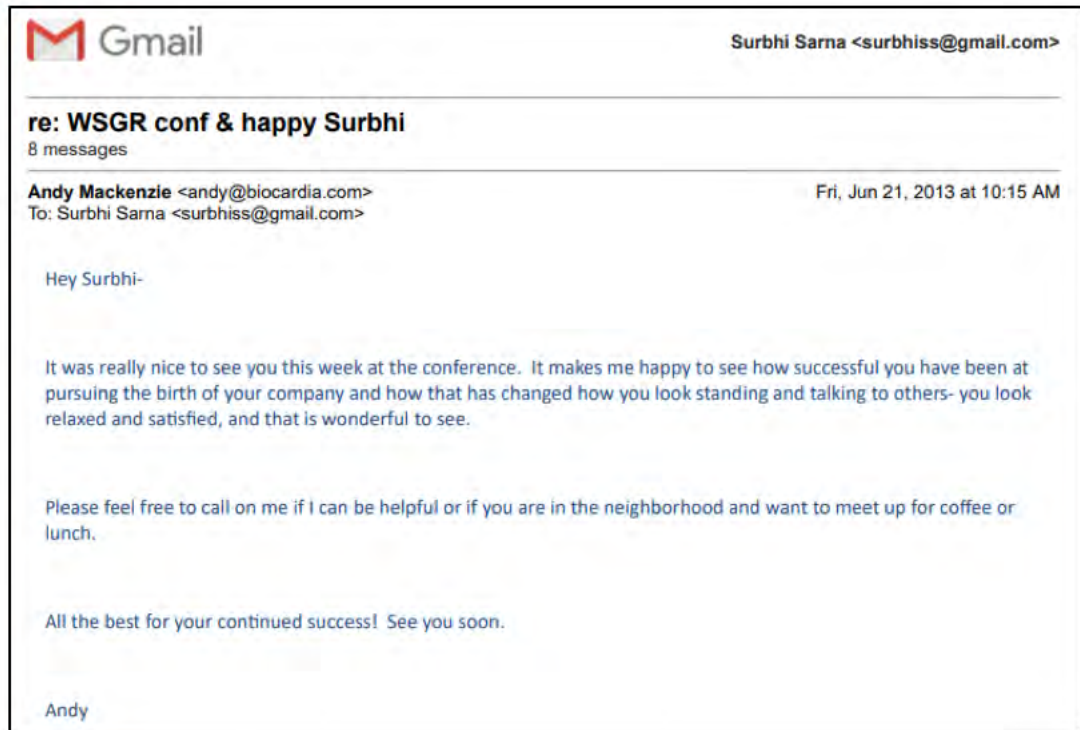
20 105. Ms. Sarna's communications with BioCardia employees also did not give
21 BioCardia notice that she had formed a competing company or that she had misappropriated
22 BioCardia intellectual property. For example, pretty much the only communication Ms. Sarna
23 had with Dr. Altman after she left BioCardia was the email below and a few additional follow-up
24
25
26
27
28

1 emails. BC-BSC_0000016. Needless to say, this did not put Dr. Altman on notice that Ms. Sarna
 2 had formed a competing business, breached the Sarna Agreement or that she had misappropriated
 3 BioCardia intellectual property.



12 106. Ms. Sarna has alleged that in June 2013, BioCardia's then COO, Mr. MacKenzie,
 13 heard Ms. Sarna speak at a conference about nVision, the ovarian cancer detection device she was
 14 developing, the design of the devices she was developing, and the patents she had filed for
 15 nVision. This is incorrect. While Mr. MacKenzie did bump into Ms. Sarna at a conference in
 16 2013, he did not hear her speak, and did not see Ms. Sarna's presentation. Mr. MacKenzie will
 17 testify to the effect that at the 2013 conference he did not learn anything about what nVision was
 18 doing, anything about nVision's detection device or its design, or anything about the patents Ms.
 19 Sarna had filed for nVision.

20 107. Ms. Sarna also cites Mr. MacKenzie's email following up from the 2013
 21 conference as somehow supporting her claim that BioCardia consented to her misappropriation.
 22 Below is what Mr. Mackenzie emailed Ms. Sarna after bumping into her at the 2013 conference:



Dkt. 1 at Ex. C. All this email states is that Mr. MacKenzie ran into Ms. Sarna at the 2013 conference (“It was really nice to see you this week at the conference.”), which is consistent with what he will testify to if asked about this interaction. What is missing from this email, or any other emails on this topic, is anything to corroborate Ms. Sarna’s claim that Mr. MacKenzie saw her 2013 presentation or learned about nVision’s products or intellectual property, which he recalls he did not.

108. BioCardia subsequently learned that, in addition to the intellectual property that nVision acquired covering the intellectual property contained in the March 2000 lab notebook entry, it also had developed a product called the Mako that incorporated much of the same intellectual property described in the lab notebook.

109. After Boston Scientific acquired nVision, it engaged in efforts to rebrand the Mako with its own product name, called Cytuity. BioCardia is informed and believes and on that basis alleges that Cytuity functions the same as Mako, and, therefore, also implements BioCardia’s intellectual property disclosed in the March 2000 lab notebook entry.

110. BioCardia is informed and believes and on that basis alleges that after or

1 simultaneously with its acquisition of nVision, Boston Scientific transferred all of nVisions's
 2 patents and patent applications, and perhaps its other intellectual property as well, to Boston
 3 Scientific Scimed.

4 ***nVision Is Chargeable with Sarna's Wrongful Acts***

5 111. nVision was directly and primarily liable for its own misappropriations of
 6 BioCardia's trade secrets and secondarily liable for Ms. Sarna's misappropriation of BioCardia's
 7 trade secrets under the doctrine of respondeat superior because Ms. Sarna, as the president and
 8 founder of nVision, was acting within the course and scope of her employment in committing the
 9 acts of misappropriation as herein alleged. *See, e.g., In re Energy Securities Litigation*, No. 15-
 10 cv-00265-EMC, 2016 WL 324150, *25 (N.D. Cal. Jan 27, 2016).

11 **COUNT I**
 12 **(Correction of Inventorship under 35 U.S.C. § 256)**
 13 **(Against Defendant nVision)**

14 112. BioCardia realleges paragraphs 1-111, inclusive.

15 113. BioCardia requests correction of inventorship of all domestic and foreign
 16 counterparts of all patents and applications in the '945 Provisional Application Family, the '120
 17 Provisional Application Family, the '472 Application Family and the Additional Provisional
 18 Applications.

19 114. "[A] joint invention is simply the product of a collaboration between two or more
 20 persons working together to solve the problem addressed.'....'People may be joint inventors even
 21 though they do not physically work on the invention together or at the same time, and even though
 22 each does not make the same type or amount of contribution.'... To be a joint inventor, one must
 23 '(1) contribute in some significant manner to the conception or reduction to practice of the
 24 invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when
 25 that contribution is measured against the dimension of the full invention, and (3) do more than
 26 merely explain to the real inventors well-known concepts and/or the current state of the art.'"
 27 *Dana-Farber Cancer Center Institute, Inc. v. Ono Pharmaceutical, Ltd.*, 964 F.3d 1365, 1371 (Fed.
 28 Cir. July 14, 2020). Here the requirements for Drs. Stertzer and Altman to be joint inventors are
 easily met as alleged below.

1 115. The March 23, 2000 entry that Dr. Altman recorded in his lab notebook disclosed
2 and described several solutions to problems in the field diagnosing, testing, and treating ovarian
3 cancer.

4 116. The inventions disclosed in the lab notebook are novel and minimally invasive
5 methods of determining ovarian state by adding imaging, testing, and treatment functionality to the
6 end of a steerable catheter system, and guiding that catheter system through a uterus to the fallopian
7 tube, where imaging, testing, and treatment can be conducted, including several different imaging,
8 testing, and treatment options that can be available at the distal end of the catheter; how this catheter
9 system could be applied in different ways depending on the ovarian condition that is to be
10 addressed; use of the catheter system in different locations in a woman's pelvis; and possible use
11 of the catheter to facilitate pregnancies.

12 117. Drs. Altman and Stertzer worked collaboratively to develop the inventions disclosed
13 in the March 23, 2000 lab notebook entry. In March 2000, Dr. Stertzer called Dr. Altman to discuss
14 what he considered to be a good business opportunity for BioCardia. According to Dr. Stertzer, it
15 would be possible to adapt the Helix and Morph catheters that BioCardia made for cardiovascular
16 applications to be used in fallopian tubes to improve the ability to diagnose pre-cancerous and
17 cancerous cysts in a less invasive way. Dr. Stertzer believed that once BioCardia's catheters were
18 properly sized, their maneuverability made them ideal for the tortuosity of the fallopian tubes.

19 118. Dr. Stertzer's contributions to the inventions in the March 2000 lab notebook entry
20 were: (1) the general idea of adapting BioCardia's catheters for gynecological applications; and
21 (2) relevant physiological information (i.e., information about body parts with which the catheter
22 system would interact).

23 119. Dr. Altman built on Dr. Stertzer's ideas by adding his conception of a catheter
24 system that could address this problem. Dr. Altman's contribution to the March 2000 lab notebook
25 entry's inventions related to the devices that could address the need that Dr. Stertzer identified.

26 120. After this initial phone call, Drs. Stertzer and Altman continued to collaborate on
27 the inventions. In the days following the call, Dr. Altman recorded Dr. Stertzer's ideas in his lab
28 notebook and added descriptions and details about the devices that he contributed to the inventions.

1 Shortly after Dr. Altman had completed the disclosure in the March 2000 lab notebook entry, he
2 reached out to Dr. Stertzner to discuss what he had contributed and further explore the inventions.
3 This set off a series of communications over the following months and years between the joint
4 inventors on this topic. During these communications, Dr. Stertzner suggested that Dr. Altman
5 follow up with various practitioners to discuss the possibility of developing the inventions,
6 including Dr. Camran Nezhat. Dr. Altman then reached out to Dr. Nezhat and began a dialogue
7 about the development and use of the catheter technologies for gynecological applications.

8 121. BioCardia has standing to bring this correction of inventorship claim because both
9 Dr. Stertzner and Dr. Altman assigned their rights to the inventions disclosed in the March 2000 lab
10 notebook entry to BioCardia through various agreements.

11 122. For example, under Section 7.1 of this agreement, Dr. Stertzner agreed that to
12 “promptly disclose all Inventions, as defined in Section 1.3 above, to [Hippocratic Engineering]”
13 which “shall be the owner of all Inventions, including all patent rights, trade secrets and other
14 intellectual property rights therein.” Section 1.3 of the agreement defined “Inventions” as “all
15 discoveries, inventions, improvements, developments, products, processes, procedures, techniques,
16 formulae, computer programs, drawings, designs, notes, documents, information and materials first
17 made, conceived, developed or reduced to practice in, the course of Advisor’s performance of
18 Advisory Services for [Hippocratic Engineering] in the Field of Advising.” Section 1.1 defined
19 “Advisory Services” as “attending meetings of the Scientific Advisory Board, reviewing research
20 and development projects, reviewing and criticizing technical and/or business opportunities and
21 devising clinical trial strategies and protocols, and other services rendered to [Hippocratic
22 Engineering] in the Field of Advising.” Section 5.3 of the agreement set out how either party may
23 terminate the agreement. Since the April 1999 signing date, neither Dr. Stertzner nor BioCardia (in
24 its present or previous forms) ever terminated Dr. Stertzner’s “Agreement for Scientific Advisor
25 Services.” As a result, Dr. Stertzner assigned his rights to the inventions disclosed in the March
26 2000 lab notebook entry.

27 123. Dr. Altman assigned his rights to the inventions disclosed in the March 2000 lab
28 notebook entry through his July 1999 employment agreement with BioCardia, which tracks the

1 language of Ms. Sarna's BioCardia employment agreement.

2 124. Under Section 3(b) of that agreement, Dr. Altman agreed to "promptly make full
3 written disclosure to [BioCardia], will hold in trust for the sole right and benefit of [BioCardia],
4 and hereby assign to [BioCardia], or its designee, all my right, title, and interest in and to any and
5 all inventions, original works of authorship, developments, concepts, improvements or trade
6 secrets." Dr. Altman's employment with BioCardia has been continuous and uninterrupted from
7 July 1999 to the present. Thus, Dr. Altman assigned his rights to the inventions disclosed in the
8 March 2000 lab notebook entry to BioCardia.

9 125. Shortly after Ms. Sarna began her full-time employment with BioCardia, Dr. Altman
10 sought to enable her entrepreneurial efforts on behalf of BioCardia and get her to work on a
11 skunkworks side project to further develop the inventions described in the March 2000 lab notebook
12 entry. During a one-on-one meeting with Ms. Sarna in or around May 2009, Dr. Altman described
13 and explained the new state of the art possibilities with gene expression profiling and the contents
14 of the March 2000 lab notebook entry. For well over an hour, Dr. Altman explained in great detail
15 the individual aspects of each disclosed invention, taking time to discuss the underlying technology
16 and the significance of these developments. Dr. Altman took this time and provided this detail
17 because he hoped that Ms. Sarna would appreciate the importance of these inventions and play an
18 important role in driving further development, collaborating with Dr. Altman to create a successful
19 business within BioCardia that focused on applications of these inventions.

20 126. BioCardia is informed and believes and on that basis alleges that Dr. Altman's May
21 2009 disclosure and March 2000 lab notebook entry was the only possible source of the inventive
22 concepts that Ms. Sarna patented (either jointly or individually) on behalf of nVision. The reason
23 for this is because no one of skill in the art, both in March 2000 and when Dr. Altman disclosed the
24 lab notebook inventions to Ms. Sarna, even realized that these inventions were technologically
25 feasible.

26 127. Gene expression profiling maximized the potential for practitioners to get any useful
27 information from the catheter approach of obtaining a biologic sample from the fallopian tube
28 envisioned by Drs. Stertzer and Altman. This is because the sample can be amplified and it contains

1 all of the information on the status of the cells. In 2000, gene expression profiling did not exist –
2 and BioCardia was one of the leaders in its development. In 2008, the first gene expression assay
3 ever was approved by the FDA, the ALLOMAP assay which was developed initially under the
4 leadership of Dr. Altman who was CEO for both BioCardia and CareDX even after the companies
5 split in 2002. Only an extremely small set of people in the entire world realized that something
6 like ovarian cancer could be tested from a small sample of cells, and how to develop these assays
7 to guide life and death clinical decisions. With the exception of Dr. Altman, none of these people
8 had the necessary experience developing catheter systems to understand the usefulness of
9 combining the two technologies.

10 128. In fact, at the time of Dr. Altman's disclosure to Ms. Sarna, BioCardia is informed
11 and believes and on that basis alleges that only three companies were involved in gene expression
12 profiling as a diagnostic product. Dr. Altman was a member of this elite group of technologists
13 because his team at BioCardia founded CareDx, one of the three gene expression profiling startups
14 that still existed (and does as a public company to this day) at the time of his disclosure to Ms.
15 Sarna. But even within this small group of people, Drs. Altman and Stertzer, through their work at
16 BioCardia, were the only ones who had sufficient familiarity with catheter devices to conceive of
17 the inventions disclosed in the March 2000 lab notebook entry. Nobody in the world of gene
18 expression profiling for early cancer diagnosis, other than Altman and Stertzer, had any idea that
19 samples from the fallopian tubes could be obtained which might correlate with ovarian state.

20 129. In addition, both in March 2000 and when Dr. Altman disclosed the lab notebook to
21 Ms. Sarna and the potential of gene expression profiling to Ms. Sarna, BioCardia is informed and
22 believes and on that basis alleges that those of skill in the art were not looking at fallopian tubes as
23 a location that could yield useful information about ovarian state. The prevailing thought at the
24 time held that determining whether a patient had ovarian cancer meant accessing and testing the
25 ovaries themselves. This was true even as first scientific information became available in 2009 that
26 many cases of ovarian cancer originated in the fallopian tube.

27 130. In the following paragraphs, BioCardia identifies the inventive contributions of Drs.
28 Altman and Stertzer in patents and applications in the '945 Provisional Application Family, the

1 '120 Provisional Application Family and the '472 Application Family. While BioCardia alleges
 2 that Drs. Altman and Stertzer should be named inventors on all patents and patent applications in
 3 those families, both domestic and foreign counterparts, for the sake of brevity BioCardia will limit
 4 the analysis to comprehensive sampling from the families.

5 131. **U.S. Patent No. 9,173,571 (member of the '945 Provisional Family):** Drs.
 6 Altman and Stertzer are, at the very least, co-inventors of U.S. Patent No. 9,173,571 ("the '571
 7 patent"). For example, Drs. Altman and Stertzer conceived, or at least contributed to the
 8 conception, of the highlighted portions of claim 1:

9 1. A device for maintaining a narrow body lumen, comprising: a hydraulic
 10 propulsion mechanism and at least one of an imaging portion or a therapeutic
 11 portion, said hydraulic propulsion mechanism configured for propelling said
 12 imaging portion or said therapeutic portion relative to said hydraulic propulsion
 13 mechanism and through the narrow body lumen, said hydraulic propulsion
 14 mechanism including an elongate shaft, wherein the narrow body lumen is distal of
 15 a distal end of said elongated shaft; wherein said imaging portion or said therapeutic
 portion, when propelled by said hydraulic propulsion mechanism, is driven distally
 from said distal end of said elongated shaft and is distally spaced therefrom; and
 a retrieval mechanism for retrieving said imaging portion or said therapeutic
 portion from the narrow body lumen.

16 Drs. Altman and Stertzer both conceived of the "device for maintaining a narrow body lumen"
 17 limitation as shown, for example, in the figures and disclosure of the March 2000 lab notebook
 18 entry that show the catheter system they invented inserted into the fallopian tubes and the spaces
 19 surrounding the inserted catheters. Drs. Altman and Stertzer both conceived of the "at least one of
 20 an imaging or a therapeutic portion" and the "wherein said imaging portion or said therapeutic
 21 portion" limitations by, for example, Dr. Stertzer's observation in the March 2000 lab notebook
 22 entry that modified BioCardia catheters could image and treat ovarian cancer and Dr. Altman's
 23 identification in the same lab notebook entry of different imaging, diagnostic, and treatment
 24 capabilities. Dr. Altman conceived of the "elongate shaft" and "is driven distally from said distal
 25 end of said elongated shaft and is distally spaced therefrom" limitations by, for example, his
 26 conception of a catheter system in the March 2000 lab notebook entry that involved a guide and a
 27 catheter that extended from the guide. Through the March 2000 lab notebook entry, Drs. Altman
 28 and Stertzer contributed to claim 1 of the '571 patent the inventive concepts of inserting a catheter

1 adapted to provide imaging and therapeutic capabilities at its distal end into the fallopian tubes by
 2 extending an elongated shaft to image gynecological structures and provide required therapy.

3 132. **U.S. Patent No. 10,610,149 (member of the '945 Provisional Patent Family):**

4 Drs. Altman and Stertzer are, at the very least, co-inventors of U.S. Patent No. 10,610,149 (“the
 5 ’149 patent”). For example, Drs. Altman and Stertzer conceived, or at least contributed to the
 6 conception, of the highlighted portions of claim 1:

7 1. A Fallopian tube diagnostic device, comprising: a catheter including a sensing
 8 portion and an inflatable portion, wherein one or more objects are detectable in the
 9 Fallopian tube via the sensing portion; and a solution lumen for providing a
 10 solution, the solution being disposable in the Fallopian tube for detecting the one
 11 or more objects; wherein the inflatable portion is adjacent and proximal to said
 sensing portion and is configured to inflate in the Fallopian tube to create a space
 around said sensing portion and to create a seal such that the fallopian tube can be
 filled with the solution.

12 Drs. Altman and Stertzer both conceived of the “fallopian diagnostic device” limitation as shown,
 13 for example, in the figures and disclosure of the March 2000 lab notebook entry explaining the
 14 catheter system they invented. Drs. Altman and Stertzer both conceived of the “catheter,” “sensing
 15 portion,” and “one or more objects are detectable in the Fallopian tube via the sensing portion”
 16 limitations, by, for example, Dr. Stertzer’s contribution to the March 2000 lab notebook entry’s
 17 disclosure that the inventive catheter could detect and diagnose pre-cancerous and cancerous
 18 structures in the fallopian tubes, and by, for example, Dr. Altman’s conception of “optional imaging
 19 capabilities” in that same lab notebook entry that could be used with the inventive catheter,
 20 including, but not limited to, fiber optics, ultrasound, and cameras. Dr. Altman conceived of the
 21 “a solution lumen for providing a solution, the solution being disposable in the Fallopian tube”
 22 through the March 2000 lab notebook entry describing catheters with lumens and the description
 23 of treatment lumen in the catheter to deliver, for example, alcohol or cytotoxic agents to the distal
 24 end of the catheter. Through the March 2000 lab notebook entry, Drs. Altman and Stertzer
 25 contributed to claim 1 of the ’149 patent the inventive concepts of inserting a catheter adapted to
 26 provide imaging capabilities at its distal end into the fallopian tubes, and using this imaging
 27 capability to detect one or more objects in the fallopian tubes.
 28

133. **PCT/US Patent Application No. 2012/022,619 (member of the '945 Provisional Patent Family)**: Drs. Altman and Stertzer are, at the very least, co-inventors of PCT/US Patent Application No. 2012/022,619 (“the ’619 application”). For example, Drs. Altman and Stertzer conceived, or at least contributed to the conception, of the highlighted portions of claim 1:

1. A device for maintaining a narrow body lumen, comprising: a hydraulic propulsion mechanism for propelling an imaging portion or a therapeutic portion through said narrow body lumen; and a retrieval mechanism for retrieving said imaging portion or said therapeutic portion from said narrow body lumen.

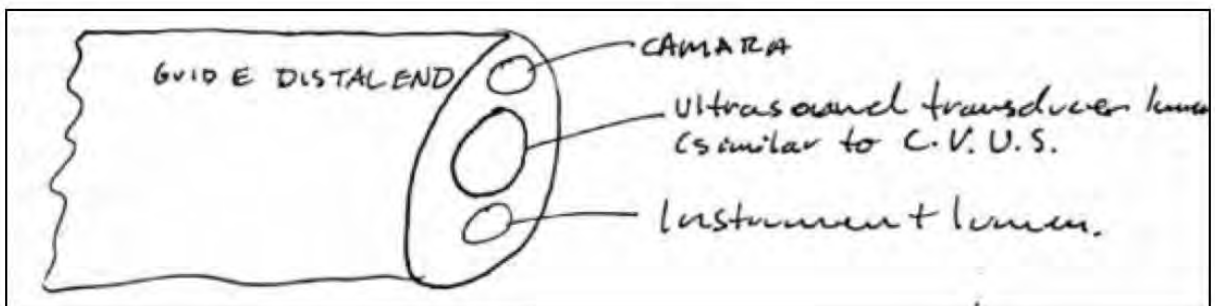
Drs. Altman and Stertzer both conceived of the “device for maintaining a narrow body lumen” limitation as shown, for example, in the figures and disclosure of the March 2000 lab notebook entry that show the catheter system they invented inserted into the fallopian tubes and the spaces surrounding the inserted catheters. Drs. Altman and Stertzer both conceived of the “propelling an imaging portion or a therapeutic portion through said narrow body lumen” limitation by, for example, Dr. Stertzer’s observation in the March 2000 lab notebook entry that modified BioCardia catheters could be inserted into fallopian tubes to image and treat ovarian state, and Dr. Altman’s identification in that same lab notebook entry of different imaging, diagnostic, and treatment capabilities that could be used with the catheter. Drs. Altman and Stertzer both conceived of the “retrieval mechanism for retrieving said imaging portion or said therapeutic portion from said narrow body lumen” limitation, by, for example, Dr. Stertzer’s conception of the catheter system being used to image, and administer treatment to, the fallopian tubes in the March 2000 lab notebook entry, and Dr. Altman’s conception in the same lab notebook entry of the guide and other structures in the catheter system. Inherent in these disclosures is the requirement that the catheter system must be withdrawn from the fallopian tube. Through the March 2000 lab notebook entry, Drs. Altman and Stertzer contributed to claim 1 of the ’619 application the inventive concepts of inserting a catheter that maintains a narrow body lumen into the fallopian tube, propelling imaging and therapeutic capabilities through the lumen, and retrieving the catheter system.

134. **U.S. Patent Application No. 15/605,407 (member of the '945 Provisional Patent Family)**: Drs. Altman and Stertzer are, at the very least, co-inventors of U.S. Patent Application No. 15/605,407 (“the ’407 application”). For example, Drs. Altman and Stertzer conceived, or at

1 least contributed to the conception, of the highlighted portions of claim 19:

2 19. A process of operating on a narrow body lumen, said process comprising:
 3 pressurizing an apparatus and configuring the apparatus to an initial configuration
 4 where an inflatable body partially extends out of a distal end of an outer shaft
 5 portion of the apparatus; inserting the partially extending inflatable body into the
 6 narrow body lumen; fully everting the inflatable body so that the inflatable body is
 7 fully deployed out of the distal end of the outer shaft portion and extends further
 8 into the narrow body lumen; and delivering at least one of a visualization instrument
 9 and therapy through an opening in the inflatable body, distally thereof and into the
 10 narrow body lumen.

11 Drs. Altman and Stertzer both conceived of the “process of operating on a narrow body lumen”
 12 limitation as shown, for example, in the figures and disclosure of the March 2000 lab notebook
 13 entry that show a catheter system they invented operating in the narrow body lumen of the fallopian
 14 tubes. Drs. Altman and Stertzer both conceived of the “distal end of an outer shaft portion of the
 15 apparatus” and “delivering at least one of a visualization instrument and therapy” limitations
 16 through, for example, Dr. Stertzer’s conception of a catheter system having a shaft with imaging
 17 and therapeutic capabilities at the distal end of the catheter, and Dr. Altman’s conception, in the
 18 same lab notebook entry, of specific catheter structures, including a catheter shaft that included, at
 19 its distal end, visualization equipment in the form of a camera, and therapy in the form of an
 20 instrument lumen. Dr. Altman also conceived of alternative visualization and therapy equipment
 21 that could be delivered through the catheter shaft.



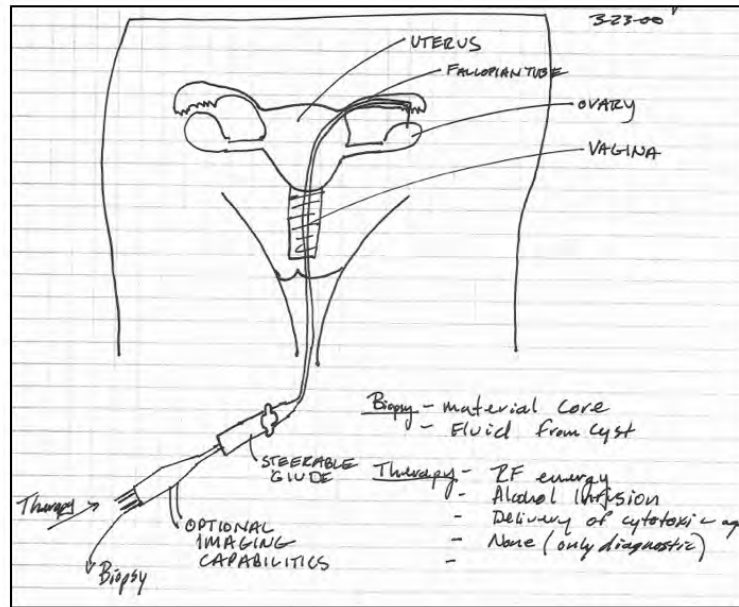
24 Through the March 2000 lab notebook entry, Drs. Altman and Stertzer contributed to claim 19 of
 25 the '407 application the inventive concepts of a process of operating on a narrow body lumen using
 26 a catheter that has, at its distal end of the catheter shaft, visualization and therapy capabilities that
 27 can be delivered to the fallopian tube.

28 135. **U.S. Patent Application No. 16/813,117 (member of the '945 Provisional Patent**

1 **Family**): Drs. Altman and Stertz are, at the very least, co-inventors of U.S. Patent Application
 2 No. 16/813,117 (“the ’117 application”). For example, Drs. Altman and Stertz conceived, or at
 3 least contributed to the conception, of the highlighted portions of claim 20:

4 20. A narrow body lumen diagnostic device, comprising: a guide wire capable of
 5 providing light for guiding a catheter to a target location, the guide wire including
 6 illuminating fibers; a catheter including a catheter shaft and imaging fibers; and an
 7 image sensor located at a proximal end of the catheter, wherein the imaging fibers
 8 extend along a length of the catheter shaft such that, during an operational state of
 the device, the imaging fibers facilitate imaging by sending imaging signals from a
 distal end of the catheter to the imaging sensor at the proximal end of the catheter.

9 Drs. Altman and Stertz both conceived of the “narrow body lumen diagnostic device” limitation
 10 as shown, for example, in the figures and disclosure of the March 2000 lab notebook entry that
 11 show a catheter system they invented diagnosing ovarian state in the narrow body lumen of the
 12 fallopian tubes. Drs. Altman and Stertz conceived of the “catheter including a catheter shaft and
 13 imaging fibers” the “wherein imaging fibers extend along a length of the catheter shaft,” and the
 14 “imaging fibers facilitate imaging by sending imaging signals from a distal end of the catheter to
 15 the imaging sensor at the proximal end of the catheter” limitations by, for example, Dr. Stertz’s
 16 conception in the March 2000 lab notebook entry of a catheter having a catheter shaft and imaging
 17 capability being inserted into fallopian tubes to diagnose ovarian state, and by Dr. Altman’s
 18 conception in the same lab notebook entry of, for example, fiber optics in the catheter shaft that run
 19 from the distal to proximal ends of the catheter structure. *See, e.g.*, the image below where
 20 “optional imaging capabilities” are labelled at the proximal end of the catheter.



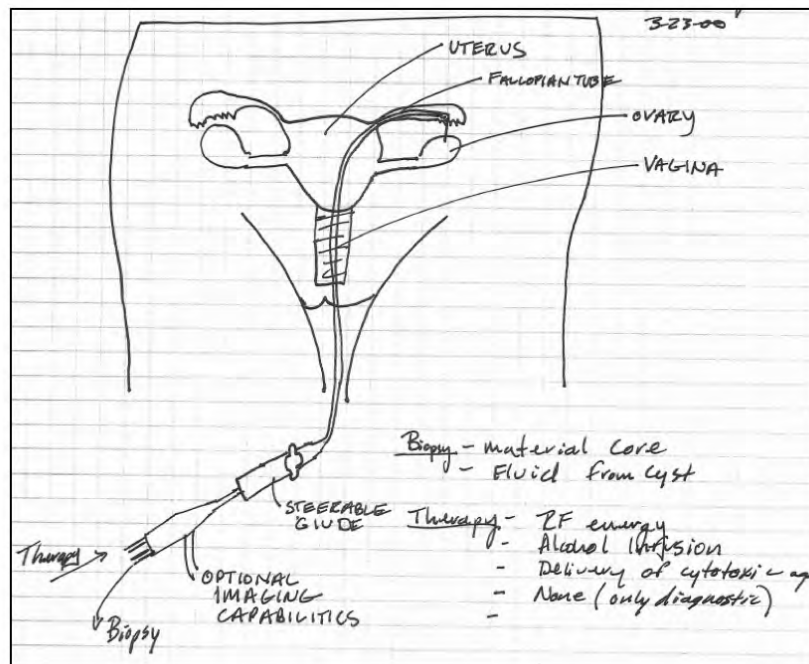
Drs. Altman and Stertzer both conceived of the “image sensor located at the proximal end of the catheter” limitation, by, for example, Dr. Stertzer’s conception in the March 2000 lab notebook entry of a catheter system having imaging capability navigating and imaging fallopian tubes, and Dr. Altman’s disclosure in the same lab notebook entry of catheter structures that allowed the image to be transported to the proximal end of the catheter. The concept of an image sensor at the proximal end of the catheter was both explicitly and inherently disclosed by Drs. Altman and Stertzer’s contributions to the lab notebook entry. Through the March 2000 lab notebook entry Drs. Altman and Stertzer contributed to claim 20 of the ’117 application the inventive concepts of a catheter system with of a narrow body lumen diagnostic device, in the form of the catheter system they invented, which included a catheter shaft, imaging fibers that ran the length of a shaft and sending an image from the distal end of the catheter to an image sensor at a proximal end.

136. **PCT/US Patent Application No. 2012/064,834 (member of the ’120 Provisional Patent Family)**: Drs. Altman and Stertzer are, at the very least, co-inventors of PCT/US Patent Application No. 2012/064,834 (“the ’834 application”). For example, Drs. Altman and Stertzer conceived, or at least contributed to the conception, of the highlighted portions of claim 1:

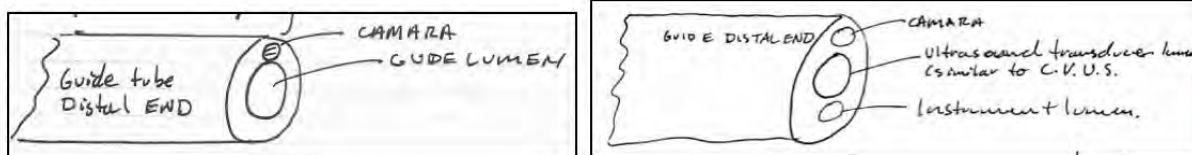
1. A device to confirm intratubal occlusion in a subject of a fallopian tube having an inner diameter, said device comprising: a tubular shaft having a distal end and an interior lumen; an examination head joined to the distal end of said shaft; a

1 visualization modality in said examination head for visual or acoustic imaging of
2 the fallopian tube; a power source for said visualization modality; a handle for
3 control of said device and for support; and an ex vivo imager of an ocular, video
4 headgear, or a video display in communication with said visualization modality.

5 Drs. Altman and Stertzer both conceived of the “device to confirm intratubal occlusion in a subject
6 of a fallopian tube having an inner diameter” limitation as shown, for example, in the figures and
7 disclosure of the March 2000 lab notebook entry that show a catheter system they invented passing
8 through the inner diameter of fallopian tubes to image structures and diagnose ovarian state. Drs.
9 Altman and Stertzer both conceived of the “tubular shaft having a distal end and an interior lumen”
10 limitation, by, for example, Dr. Stertzer’s conception in the March 2000 lab notebook entry of a
11 catheter system that could be inserted into fallopian tubes to deliver treatment or even implant eggs
12 from a donor, which necessarily would involve a tubular shaft with an interior lumen, and by Dr.
13 Altman’s conception in the same lab notebook entry of different tubular shafts that had lumens, as
14 shown in the images below. Drs. Altman and Stertzer also both conceived of the “examination
15 head joined to the distal end of the shaft” limitation by, for example, Dr. Stertzer’s disclosure in the
16 March 2000 lab notebook entry of a catheter system that could image and diagnose ovarian state,
17 and by Dr. Altman’s disclosure in the same lab notebook entry of examination heads in the form of
18 cameras, fiber optics, and ultrasound at the distal end of the catheter shaft.
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Dr. Altman conceived of the “visualization modality in said examination head for visual or acoustic imaging of fallopian tube” limitation, by, for example, his disclosure in the March 2000 lab notebook entry of “optional imaging capabilities” including ultrasound, fiber optic, and camera capabilities at the distal end of the catheter system he invented with Dr. Stertzer. Dr. Altman also conceived of the “handle for control of said device and for support” limitation when, for example, he drew just such a handle in the March 2000 lab notebook entry for the catheter system he helped invent.



Drs. Altman and Stertzer also both conceptualized the “ex vivo imager of an ocular, video headgear, or a video display in communication with said visualization modality” limitation by, for example, Dr. Stertzer’s conceptualization in the March 2000 lab notebook entry of a catheter system that could provide imagery from inside a fallopian tube. Inherent in that disclosure, is the use of a display outside the body that was in communication with the visualization modality of the catheter system he helped invent. Dr. Altman’s conception of the “ex vivo imager” limitation was explicitly

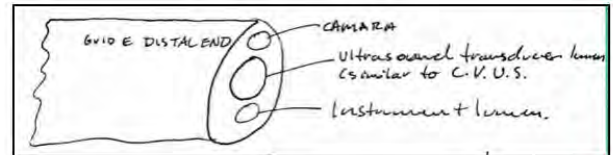
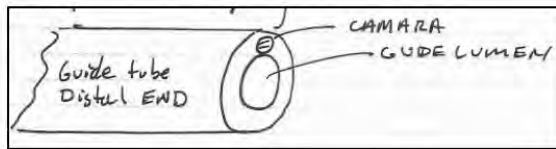
disclosed in same lab notebook entry by his drawing of the entire catheter system where he noted “optional imaging capabilities” outside the patient’s vagina. Through the March 2000 lab notebook entry, Drs. Altman and Stertzer contributed to claim 1 of the ’834 application the inventive concepts of a catheter system with: (1) a tube-shaped catheter that has an interior lumen and a distal end; (2) an examination head on the distal end of the catheter for examining the interior of the fallopian tube; (3) a camera, or fiber optics, or ultrasound as part of the examination head to visualize the interior of a fallopian tube; (4) a handle to control and support the catheter system; and (5) an ex vivo monitor in communication with the camera, fiber optics, or ultrasound so that a practitioner can observe the images captured by the catheter system.

137. **U.S. Patent Application No. 14/323,859 (member of the ’120 Provisional Patent Family)**: Drs. Altman and Stertzer are, at the very least, co-inventors of U.S. Patent Application No. 2012/064,834 (“the ’834 application”). For example, Drs. Altman and Stertzer conceived, or at least contributed to the conception, of the highlighted portions of claim 1:

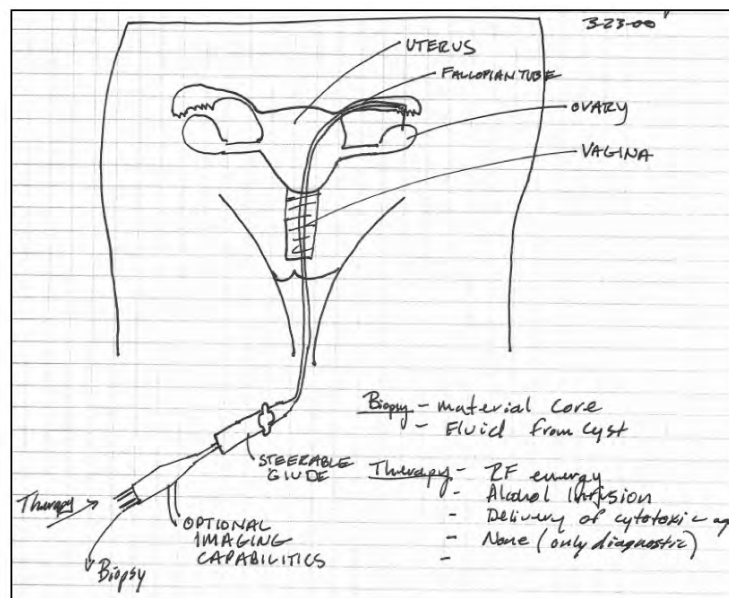
1. A device to confirm intratubal occlusion in a subject of a fallopian tube having an inner diameter, said device comprising: a tubular shaft having a distal end and an interior lumen; an examination head joined to the distal end of said shaft; a visualization modality in said examination head for visual or acoustic imaging of the fallopian tube; a power source for said visualization modality; a handle for control of said device and for support; and an ex vivo imager of an ocular, video headgear, or a video display in communication with said visualization modality.

Drs. Altman and Stertzer both conceived of the “device to confirm intratubal occlusion in a subject of a fallopian tube having an inner diameter” limitation as shown, for example, in the figures and disclosure of the March 2000 lab notebook entry that show a catheter system they invented passing through the inner diameter of fallopian tubes to image structures and diagnose ovarian state. Drs. Altman and Stertzer both conceived of the “tubular shaft having a distal end and an interior lumen” limitation, by, for example, Dr. Stertzer’s conception in the March 2000 lab notebook entry of a catheter system that could be inserted into fallopian tubes to deliver treatment or even implant eggs from a donor, which necessarily would involve a tubular shaft with an interior lumen, and by Dr. Altman’s conception in the same lab notebook entry of different tubular shafts that had lumens, as shown in the images below. Drs. Altman and Stertzer also both conceived of the “examination

head joined to the distal end of the shaft” limitation by, for example, Dr. Sterzer’s disclosure in the March 2000 lab notebook entry of a catheter system that could image and diagnose ovarian state, and by Dr. Altman’s disclosure in the same lab notebook entry of examination heads in the form of cameras, fiber optics, and ultrasound at the distal end of the catheter shaft.



Dr. Altman conceived of the “visualization modality in said examination head for visual or acoustic imaging of fallopian tube” limitation, by, for example, his disclosure in the March 2000 lab notebook entry of “optional imaging capabilities” including ultrasound, fiber optic, and camera capabilities at the distal end of the catheter system he invented with Dr. Stertzer. Dr. Altman also conceived of the “handle for control of said device and for support” limitation when, for example, he drew just such a handle in the March 2000 lab notebook entry for the catheter system he helped invent.



Drs. Altman and Stertzer also both conceptualized the “ex vivo imager of an ocular, video headgear, or a video display in communication with said visualization modality” limitation by, for example, Dr. Stertzer’s conceptualization in the March 2000 lab notebook entry of a catheter system that

could provide imagery from inside a fallopian tube. Inherent in that disclosure, is the use of a display outside the body that was in communication with the visualization modality of the catheter system he helped invent. Dr. Altman's conception of the "ex vivo imager" limitation was explicitly disclosed in same lab notebook entry by his drawing of the entire catheter system where he noted "optional imaging capabilities" outside the patient's vagina. Through the March 2000 lab notebook entry, Drs. Altman and Stertzer contributed to claim 1 of the '834 application the inventive concepts of a catheter system with: (1) a tube-shaped catheter that has an interior lumen and a distal end; (2) an examination head on the distal end of the catheter for examining the interior of the fallopian tube; (3) a camera, or fiber optics, or ultrasound as part of the examination head to visualize the interior of a fallopian tube; (4) a handle to control and support the catheter system; and (5) an ex vivo monitor in communication with the camera, fiber optics, or ultrasound so that a practitioner can observe the images captured by the catheter system.

138. **PCT/US Patent Application No. 2017/019,700 (member of the '472 Application Patent Family)**: Drs. Altman and Stertzer are, at the very least, co-inventors of PCT/US Patent Application No. 2017/019,700 ("the '700 application"). For example, Drs. Altman and Stertzer conceived, or at least contributed to the conception, of the highlighted portions of claim 1:

1. A process of collecting cells from a tissue surface in a subject comprising: deploying a distal end of a catheter at a proximal end of the tissue surface; everting a balloon extendible from the distal end of the catheter to contact the tissue surface with sufficient force to dislodge the cells from the tissue surface; and withdrawing said balloon from the subject to collect the cells.

When Dr. Altman described the contents of the March 2000 lab notebook entry to Ms. Sarna, he conveyed the conception of these highlighted limitations to Ms. Sarna, who then provided these concepts as part of her collaboration with Dr. Chin and other nVision employees and consultants that resulted in PCT/US Patent Application No. 2017/019,700. Drs. Altman and Stertzer both conceived of the "process of collecting cells from a tissue surface in a subject" limitation by, for example, Dr. Stertzer's disclosure in the March 2000 lab notebook entry of using modified versions of BioCardia's Helix and Morph catheters inserted into a fallopian tube to collect cells to improve the diagnosis and treatment of ovarian cancer, and by Dr. Altman's disclosure in the same lab

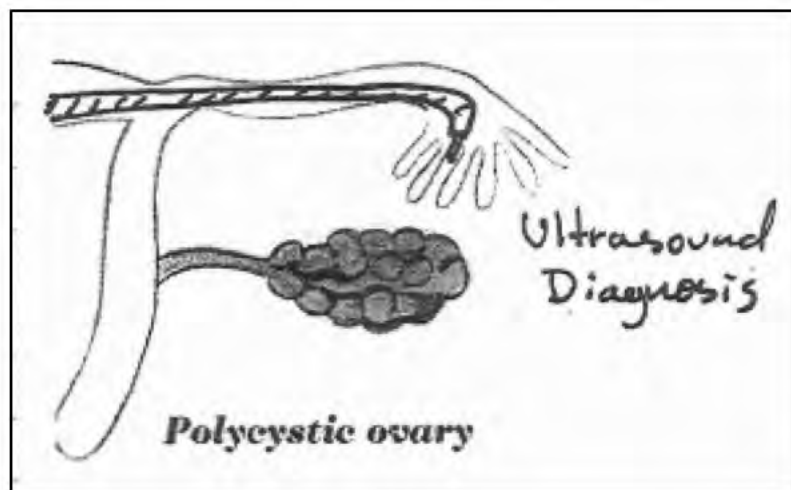
notebook entry of a catheter system with the ability to perform fluid and material core biopsies in the fallopian tubes to diagnose ovarian state. Dr. Altman conceived of the “deploying a distal end of a catheter at a proximal end of the tissue surface” limitation by, for example, describing in the March 2000 lab notebook entry of a catheter system that had a distal end that could be steered through the tortuosity of the fallopian tube. Dr. Altman also conceived of the element that is “extendible from the distal end of the catheter to contact the tissue surface with sufficient force to dislodge the cells from the tissue surface” by, for example, describing in the March 2000 lab notebook entry of a biopsy probe that is capable of fluid or material core biopsies. Finally, both Drs. Stertzer and Altman conceived of the “withdrawing ... from the subject to collect the cells” limitation by, for example, Dr. Stertzer’s disclosure in the March 2000 lab notebook entry of utilizing a catheter system inserted into a fallopian tube to collect cells to diagnose ovarian state in a less invasive fashion, and Dr. Altman’s disclosure in the same lab notebook entry of an implement capable of taking a fluid or material core biopsy. Inherent in both of these disclosures is the requirement that whatever is taking the biopsy is withdrawn from the subject to test the collected cells. Through the March 2000 lab notebook entry, Drs. Altman and Stertzer contributed to claim 1 of the ’700 application the inventive concepts of a guiding the distal end of a catheter through a fallopian tube to collect cells lining the lumen and withdrawing the catheter with the collected cells from the patient.

139. **PCT/US Patent Application No. 2018/000,229 (member of the ’472 Application Patent Family)**: Drs. Altman and Stertzer are, at the very least, co-inventors of PCT/US Patent Application No. 2018/000,229 (“the ’229 application”). For example, Drs. Altman and Stertzer conceived, or at least contributed to the conception, of the highlighted portions of claim 1:

1. A device for Fallopian tube diagnostics, comprising: a tube having a distal end; a balloon having a first end coupled to the distal end of the tube, the balloon being disposed in the tube in a first, inverted position and movable to a second, everted position, extendable a distance distal of the tube distal end, such that a surface of the balloon is contactable with an inner surface of the Fallopian tube; and a push wire having a distal end coupled to a second end of the balloon, wherein the balloon is movable from the first inverted position to the second everted position by actuation of the push wire; wherein a surface of the balloon includes a plurality of surface features for collection, retention, or both, of a tissue sample of the inner

surface of the Fallopian tube.

When Dr. Altman described the contents of the March 2000 lab notebook entry to Ms. Sarna, he conveyed the conception of these highlighted limitations to Ms. Sarna, who then provided these concepts as part of her collaboration with Dr. Chin and other nVision employees and consultants that resulted in PCT/US Patent Application No. 2018/000,229. Drs. Altman and Stertzer both conceived of the “device for fallopian tube diagnostics” limitation as shown, for example, in the figures and disclosure of the March 2000 lab notebook entry that show a catheter system they invented diagnosing ovarian state in the fallopian tubes. Both Drs. Altman and Stertzer conceived of the “tube having a distal end” limitation by, for example, Dr. Stertzer’s disclosure in the March 2000 lab notebook entry of guiding the distal end of a catheter tube through the fallopian tubes to diagnose ovarian state, and Dr. Altman’s disclosure in the same lab notebook entry of diagrams of the catheter system with a distal end in fallopian tubes.



Drs. Altman conceived of the “extendable a distance distal of the tube distal end” limitation by, for example, his disclosure in the March 2000 lab notebook entry of a probe that extends beyond the distal end of the catheter to collect cells from the fallopian tubes. Drs. Altman and Stertzer both conceived of the “contactable with an inner surface of the Fallopian tube” and “plurality of surface features for collection, retention, or both, of a tissue sample of the inner surface of the Fallopian tube” limitations by, for example, Dr. Stertzer’s disclosure in the March 2000 lab notebook entry of a catheter system that could be inserted into fallopian tubes to collect cells to diagnose ovarian

1 state, and Dr. Altman's disclosure in the same lab notebook entry of a probe for collecting fluid
 2 and material core samples of tissue. Through the March 2000 lab notebook entry, Drs. Altman and
 3 Stertzer contributed to claim 1 of the '229 application the inventive concepts of a fallopian tube
 4 diagnostic device in the form of a catheter system with a tube having a distal end that extended
 5 into, and contacted the inner surface of, the fallopian tubes to deploy a plurality of surfaces for the
 6 collection and retention of tissue samples.

7 140. **U.S. Patent No. 10, 639,016 (member of the '472 Application Patent Family):**

8 Drs. Altman and Stertzer are, at the very least, co-inventors of U.S. Patent No. 10,639,016 ("the
 9 '016 patent"). For example, Drs. Altman and Stertzer conceived, or at least contributed to the
 10 conception, of the highlighted portions of claim 1:

11 1. A process of collecting cells from a tissue surface of a Fallopian tube in a subject
 12 comprising: deploying a distal end of a catheter at a proximal end of the tissue
 13 surface of the Fallopian tube; everting an inelastic balloon extendible from the
 14 distal end of the catheter to contact the tissue surface of the Fallopian tube wherein
 15 in response to everting, over-expansion of the Fallopian tube by the inelastic
 16 balloon is prevented; partially deflating said balloon to form wrinkles on an outer
 17 surface of said balloon and capturing the cells on said wrinkles; and withdrawing
 18 said balloon from the subject to collect the cells from the Fallopian tube.

19 When Dr. Altman described the contents of the March 2000 lab notebook entry to Ms. Sarna, he
 20 conveyed the conception of these highlighted limitations to Ms. Sarna, who then provided these
 21 concepts as part of her collaboration with Dr. Chin and other nVision employees and consultants
 22 that resulted in U.S. Patent No. 10,639,016. Drs. Altman and Stertzer both conceived of the
 23 "process of collecting cells from a tissue surface of a Fallopian tube in a subject" limitation as
 24 shown, for example, in the figures and disclosure of the March 2000 lab notebook entry that show
 25 a catheter system they invented diagnosing ovarian state in the fallopian tubes. Both Drs. Altman
 26 and Stertzer conceived of the "deploying a distal end of a catheter at a proximal end of the tissue
 27 surface of the Fallopian tube" and "extendible from the distal end of the catheter to contact the
 28 tissue surface of the Fallopian tube" limitations by, for example, Dr. Stertzer's disclosure in the
 March 2000 lab notebook entry of navigating a catheter through the fallopian tubes to collect tissue
 samples to diagnose ovarian state, and Dr. Altman's disclosure in the same lab notebook entry of a

catheter that includes implements at its distal end that can perform fluid or material core biopsies in the fallopian tubes. Both Drs. Altman and Stertzer conceived of the “capturing the cells” and “collect the cells from the Fallopian tube” limitations by, for example, Dr. Stertzer’s disclosure in the March 2000 lab notebook entry of a catheter system that could diagnose ovarian state by testing tissue samples from the fallopian tubes, and Dr. Altman’s disclosure in the same lab notebook entry of a catheter that has, on its distal end, implements capable of collecting, for example, fluid or material core cell samples from the fallopian tube. Through the March 2000 lab notebook entry, Drs. Altman and Stertzer contributed to claim 1 of the ’016 patent the inventive concepts of a process of collecting cells from a tissue surface of a Fallopian tube in a subject by deploying the distal end of a catheter to collect cells from the fallopian tube.

141. **U.S. Patent No. 10,646,209 (member of the ’472 Application Patent Family):**

Drs. Altman and Stertzer are, at the very least, co-inventors of U.S. Patent No. 10,646,209 (“the ’209 patent”). For example, Drs. Altman and Stertzer conceived, or at least contributed to the conception, of the highlighted portions of claim 1:

1. A catheter comprising: a tube having a distal end; a balloon having a distal end secured to the distal end of the tube at a proximal end of the balloon, the balloon having a length, a majority of the length of the balloon being inelastic, said balloon being adapted to evert from an inverted position to a longitudinally extended everted position in a Fallopian tube so as to prevent over-expansion of the Fallopian tube during eversion; and an extending portion comprising a filament disposed at the distal end of said balloon moveable between the inverted position and the longitudinally extended everted position with eversion of said balloon; wherein each of said balloon and said filament has an outer surface configured to remove and retain cells from a wall of the Fallopian tube; wherein the filament is configured to curl, spread, fan, ball-up, or expand-out, or combinations thereof, in response to the balloon moving between the inverted position and the everted position.

When Dr. Altman described the contents of the March 2000 lab notebook entry to Ms. Sarna, he conveyed the conception of these highlighted limitations to Ms. Sarna, who then provided these concepts as part of her collaboration with Dr. Chin and other nVision employees and consultants that resulted in U.S. Patent No. 10,646,209. Drs. Altman and Stertzer both conceived of the “catheter” and “tube having a distal end” limitations by, for example, Dr. Stertzer’s disclosure in the March 2000 lab notebook entry of the distal end of a catheter tube navigating the fallopian tubes

to collect cells to determine ovarian state, and Dr. Altman's disclosure in the same lab notebook entry of a catheter system having a tube with a distal end that is guided to the fallopian tubes. Drs. Altman and Stertzer also conceived of the "outer surface configured to remove and retain cells from a wall of the Fallopian tube" limitation by, for example, Dr. Stertzer's disclosure in the March 2000 lab notebook entry of using a catheter system to navigate the fallopian tubes to collect tissue samples to determine ovarian state, and Dr. Altman's disclosure of implements at the distal end of the catheter that are capable of collecting fluid and material core samples from the fallopian tubes. Through the March 2000 lab notebook entry, Drs. Altman and Stertzer contributed to claim 1 of the '209 patent the inventive concepts of a the distal end of a catheter tube being equipped with implements capable of collecting cells from the wall of the fallopian tube so that tests may be performed to determine ovarian state.

142. **WO 2014/121207 (member of the '472 Application Patent Family)**: Drs. Altman and Stertzer are, at the very least, co-inventors of WO 2014/121207 ("the '207 application"). For example, Drs. Altman and Stertzer conceived, or at least contributed to the conception, of the highlighted portions of claim 1:

1. A process of collecting cells from a Fallopian tube in a subject comprising: deploying a distal end of a catheter at the proximal end of the Fallopian tube; everting a balloon on the distal end of the catheter to urge an extending portion into the Fallopian tube with sufficient force to dislodge the cells from an inner wall of the Fallopian tube; and withdrawing said extending portion from the subject to collect the cells.

When Dr. Altman described the potential of gene expression profiling and the approach EXACT Science had taken to collect cells from a stool sample that rubs against the colon wall in combination with the contents of the March 2000 lab notebook entry to Ms. Sarna, he conveyed the conception of these highlighted limitations to Ms. Sarna, who then provided these concepts as part of her collaboration with Dr. Chin and other nVision employees and consultants that resulted in WO 2014/121207. Drs. Altman and Stertzer both conceived of the "process of collecting cells from a Fallopian tube in a subject," "deploying a distal end of a catheter at the proximal end of the Fallopian tube," "urge an extended portion into the Fallopian tube with sufficient force to dislodge the cells from an inner wall of the Fallopian tube," and "withdrawing said extended portion from

1 the subject to collect the cells” limitations. Dr. Stertzer conceived all of these limitations by, for
2 example, his disclosure in the March 2000 lab notebook entry of deploying a distal end of a catheter
3 in the fallopian tube to collect cells and then withdrawing the catheter system so that the collected
4 cells can be tested for the presence of ovarian cancer. Dr. Altman conceived of these limitations
5 by, for example, his disclosure in the March 2000 lab notebook entry of components on the distal
6 end of a catheter system that could perform fluid or material core biopsies, and components of the
7 catheter system that could be used to withdraw the catheter implements that collected the cells.
8 Through the March 2000 lab notebook entry, Drs. Altman and Stertzer contributed to claim 1 of
9 the ’207 application the inventive concepts of deploying the distal end of a catheter into the
10 fallopian tube to collect cells from the inner wall of the tube and then withdrawing the catheter so
11 that the collected cells could be tested.

12 143. As alleged herein, BioCardia did not discover, and could not have discovered, its
13 correction of inventorship claims through the exercise of reasonable diligence, until December
14 2018 or December 2019. Ms. Sarna fraudulently concealed her wrongful acts, postponing the
15 accrual of BioCardia’s claims and therefore the beginning of the running of the statute of limitations
16 until BioCardia actually discovered the fraudulent acts, because among other things as herein
17 alleged, Ms. Sarna (a) concealed her wrongdoing from BioCardia which (b) she was contractually
18 obligated to disclose to BioCardia (c) which concealment she did with the intent to defraud
19 BioCardia (d) of which fraudulent acts BioCardia was unaware until January 2019 and upon which
20 BioCardia would have acted earlier had it been earlier aware of them, causing BioCardia to sustain
21 the damage alleged herein.

22 144. Drs. Altman and Stertzer are omitted inventors for all members of the ’945
23 Provisional Application Family, the ’120 Provisional Application Family, the ’472 Application
24 Family, and the Additional Provisional Applications. Moreover, BioCardia is a proper assignee of
25 the ’945 Provisional Application Family, the ’120 Provisional Application Family, the ’472
26 Application Family, and the Additional Provisional Applications.

27 145. BioCardia requests correction of inventorship of the patents and patent applications,
28 both domestic and foreign counterparts, in the ’945 Provisional Application Family, the ’120

Provisional Application Family, and the '472 Application Family to name Dr. Peter Altman and Dr. Simon Stertz as co-inventors. Moreover, BioCardia seeks assignment of the rights in and to the '945 Provisional Application Family, the '120 Provisional Application Family, the '472 Application Family, and the Additional Provisional Applications.

COUNT II
(Disgorgement of Unjust Enrichment and Imposition of Constructive Trust)
(Against All Defendants)

146. BioCardia realleges paragraphs 1-145, inclusive.

147. The Sarna Agreement is a valid and enforceable contract with BioCardia.

148. BioCardia has duly performed all conditions, covenants, and promises required on its part to be performed pursuant to the Sarna Agreement.

149. Ms. Sarna breached her contractual obligations to BioCardia under the Sarna Agreement by, *inter alia*:

a. Failing to preserve the confidentiality of BioCardia trade secrets and only using BioCardia confidential information for the benefit of BioCardia, as required by Section 2(a) of the Sarna Agreement;

b. Failing to disclose to and assign to BioCardia each of the patents and patent applications in the '945 Provisional Patent Family, '120 Provisional Patent Family, '472 Application Family, and the Additional Provisional Applications, as required by Section 3(b) of the Sarna Agreement;

c. Failing to keep and maintain adequate and current written records of all inventions she made during her term of her employment with BioCardia, as required by 3(d) of the Sarna Agreement;

d. Failing to assist BioCardia in "in every proper way to secure" its rights in the inventions Ms. Sarna made during her employment at BioCardia, as required by Section 3(e) of the Sarna Agreement;

e. Although Ms. Sarna now claims that the inventions she patented during her employment with BioCardia were covered by California Labor Code Section 2870, Ms.

1 Sarna never disclosed those inventions to BioCardia in writing, as required by Section 3(f)
2 of the Sarna Agreement;

3 f. Engaging in “employment, occupation, consulting or other business activity
4 directly related to the business” of BioCardia when she founded and worked on behalf of
5 nVision, as prohibited by Section 4(a) of the Sarna Agreement;

6 g. By engaging in consulting work on behalf of nVision without first reporting
7 the nature of the work and the time commitment of the proposed work, as prohibited by
8 Section 4(b) of the Sarna Agreement;

9 h. Keeping in her possession, and using for the benefit of nVision, confidential
10 BioCardia documents that she emailed to herself, as prohibited by Section 5 of the Sarna
11 Agreement; and

12 i. Violating several items in the BioCardia Conflict of Interest Guidelines, as
13 prohibited by Section 8 of the Sarna Agreement.

14 150. BioCardia is informed and believes and on that basis alleges that the Shareholder
15 Defendants are sophisticated companies and investors focused on investments in or acquisitions
16 of early-stage companies (each an “Investment Target”) and, thus, are familiar with intellectual
17 property issues that Investment Targets have. These include, among other things, that a former
18 employer of a founder of an Investment Target might have a claim to ownership of the inventions
19 claimed by the Investment Target, or that the inventions claimed by the Investment Target may be
20 based on trade secrets misappropriated from a former employer because, among other things.

21 a. They had been contractually assigned by the founder to the founder’s former
22 employer;

23 b. They were co-invented with an employee or employees of the founder’s former
24 employer; or

25 c. They were based on information learned at and/or belonging to the former employer.

26 151. BioCardia is informed and believes and on that basis alleges that because of,
27 among other things, the intellectual property issues that an Investment Target might have with a
28 founder’s former employer, the Shareholder Defendants customarily perform “due diligence” on

1 an Investment Target focusing particularly on ferreting out any issues that might exist with the
2 Investment Target's ownership or right to use its purported technology and intellectual property.

3 152. BioCardia is informed and believes and on that basis alleges that the Shareholder
4 Defendants focused on investments in and acquiring early-stage medical device companies and,
5 therefore, knew, or at least should have known, that BioCardia, the company nVision's founder,
6 Ms. Surbhi Sarna, worked for immediately prior to nVision, was also a medical device company
7 working on the same type of medical device that nVision planned to work on: diagnostic
8 catheters.

9 153. BioCardia is informed and believes and on that basis alleges that, as specialists in
10 investments in or acquisitions of early stage medical device companies, the Shareholder
11 Defendants knew or at least should have known there was a heightened risk – well beyond the
12 risks inherent in any early stage company - that nVision's technology and intellectual property
13 actually belonged to BioCardia.

14 154. BioCardia is informed and believes and on that basis alleges that, in addition to the
15 heightened risk inherent in the fact that nVision was focused on the same type of medical device
16 development as was BioCardia (diagnostic catheters), the Shareholder Defendants knew that there
17 was a likelihood that nVision's claimed technology and intellectual property actually belonged to
18 or had been misappropriated from BioCardia, because they knew or at least should have known
19 through their due diligence of nVision that:

20 a. Ms. Sarna's undergraduate major was molecular and cellular biology. She
21 does not have any graduate degrees. Her work at BioCardia dealt with tracking device
22 failures, ensuring label compliance, and obtaining materials from vendors. While at
23 BioCardia, Ms. Sarna's work responsibilities did not include designing or developing
24 medical devices. BioCardia is informed and believes and on that basis alleges that Ms.
25 Sarna's only other experience in the medical device space involved similar tasks as the
26 ones she performed at BioCardia. Ms. Sarna's age, education, and work experience were
27 highly unusual for someone who allegedly came up with a medical device and technique
28

1 so revolutionary that a company like Boston Scientific Corporation would value it at
2 hundreds of millions of dollars.

3 b. Ms. Sarna started consulting with BioCardia on September 15, 2008 and
4 became a full-time employee of BioCardia on November 3, 2008, at which time she
5 signed the Sarna Agreement, and where she worked until resigning in January 2012;

6 c. Ms. Sarna registered nVision as a Delaware corporation on September 28,
7 2009, the year after she joined BioCardia and more than two years before she left
8 BioCardia and apparently ran it in “stealth mode” to conceal its existence from BioCardia;

9 d. Ms. Sarna entered into a “Technology Transfer Agreement” “effective as
10 of December 26, 2009 between Surbhi Sarna (the ‘Founder’), and nVision Medical
11 Corporation, a Delaware corporation” more than two years before she left BioCardia.

12 e. In the Technology Transfer Agreement, Ms. Sarna assigned to nVision
13 “All rights, title and interests in and to all intellectual property arising out of or related to
14 the ‘nVision Medical; business plan, including, without limitation, all ideas, designs,
15 techniques, processes, formulas, trade secrets, inventions, discoveries, improvements,
16 research or development and test results, specifications, data, know-how, business
17 methods, marketing plans, other business plans, strategies, forecasts, unpublished
18 financial information, budgets, projections, business prospects, copyrights and trademarks
19 (inclusive of all goodwill relate thereto), and the following trademark, copyright, and
20 patent applications and registrations.” The patent application identified in the Technology
21 Transfer Agreement is a “USPTO provisional patent application filed on or around
22 September 29, 2009.”

23 f. Ms. Sarna only registered nVision to do business in California on February
24 21, 2012, about a month after she left BioCardia, when, BioCardia is informed and
25 believes and on that basis alleges, she believed it was no longer possible to conceal
26 nVision’s existence from BioCardia.

27 g. BioCardia is informed and believes and on that basis alleges that the
28 **incorporation** of nVision more than two years **before** Ms. Sarna left BioCardia, and the

1 **registration** of nVision to do business in California only **after** she had left BioCardia,
2 alone should have set off alarm bells in any competent due diligence conducted by or for
3 anyone seeking to invest in nVision;

4 h. Ms. Sarna, in common with most Silicon Valley employees, was
5 contractually obligated to assign to BioCardia inventions she made while working at
6 BioCardia (see **Exhibit A** attached hereto-the Sarna Agreement), subject only to her
7 proving that they were excluded by Labor Code § 2870, which BioCardia is informed and
8 believes and on that basis alleges that anyone seeking to invest in nVision would
9 understand was unlikely given that both nVision and BioCardia were in the same general
10 area of medical devices (diagnostic catheters);

11 i. On January 25, 2011, while a BioCardia employee and a year before Ms.
12 Sarna left BioCardia, Ms. Sarna filed U.S. Provisional application No. 61/435,945 (“the
13 ’945 provisional patent application”);

14 j. On December 3, 2010, while still a BioCardia employee and a year before
15 Ms. Sarna left BioCardia, Ms. Sarna emailed Anula Jayasuriya, then affiliated with
16 Defendant Astia Angels nVision LLC and later affiliated with Defendant eXXclaim
17 Capital Partners I, L.P., and Linda Greub, then a partner at Defendant LMNVC, LLC,
18 from her BioCardia account requesting help conceptualizing the invention of the ’945
19 provisional patent application;

20 k. Ms. Sarna subsequently filed three other published applications claiming
21 priority to the ’945 provisional patent application;

22 l. On November 13, 2011, also while still a BioCardia employee, Ms. Sarna
23 filed a provisional application entitled “Device and method to confirm occlusion of
24 the fallopian tube”; and

25 m. Ms. Sarna subsequently filed Application No. 14/357,875, which claimed
26 priority to the ’120 provisional patent application.

27 155. BioCardia is informed and believes and on that basis alleges that the Shareholder
28 Defendants knew, or at least should have known, that the filing of all of these patent applications

1 while Ms. Sarna was employed by BioCardia, but which were assigned to nVision, meant that the
2 patent applications likely had been contractually assigned to BioCardia.

3 156. BioCardia is informed and believes and on that basis alleges that the Shareholder
4 Defendants also knew, or at least should have known, that the filing of all of these patent
5 applications while Ms. Sarna was employed by BioCardia, but which were assigned to nVision,
6 meant that there likely were unnamed BioCardia co-inventors on some or all of the patent
7 applications.

8 157. BioCardia is informed and believes and on that basis alleges that the Shareholder
9 Defendants also knew, or at least should have known, that the filing of all of these patent
10 applications while Ms. Sarna was employed by BioCardia, but which were assigned to nVision,
11 together with the other acts alleged above while Ms. Sarna was a BioCardia employee, meant that
12 nVision's purported technology and intellectual property likely was based on misappropriated
13 BioCardia trade secrets.

14 158. The risks undertaken by an investor who knows or should know that the
15 technology and intellectual property claimed by an Investment Target likely belongs to a former
16 employer as is with the case with the patents Ms. Sarna was contractually obligated to assign to
17 BioCardia, or is likely based on trade secrets misappropriated from a former employer, is unlike
18 any common investment and market risk. While common investment risks, if realized, might
19 operate to reduce the value of the Investment Target and, therefore, the value of the investor's
20 investment, an investor who knows or should know that the technology and intellectual property
21 claimed by an Investment Target is likely based on patents rightfully owned by another or trade
22 secrets misappropriated from another is exposed to the equitable rights of the rightful owner of
23 the technology and intellectual property, including, as alleged below, the risk of disgorgement of
24 all benefits of the investment.

25 159. Here, the Shareholder Defendants' investment in nVision was made with the
26 actual or imputed knowledge that the technology and intellectual property claimed by Ms. Sarna
27 and nVision was likely based on patents belonging to and trade secrets misappropriated from
28 BioCardia; accordingly, they did not undertake a common investment risk but, rather, undertook

1 the risk of disgorgement of all benefits from their investment.

2 160. The Shareholder Defendants' liability to BioCardia is direct, not vicarious, and
3 does not require piercing nVision's corporate veil.

4 161. BioCardia is informed and believes and on that basis alleges that the Shareholder
5 Defendants made a conscious decision to participate in and further the wrongful acts of nVision
6 and Ms. Sarna by investing in nVision and providing it with the funding necessary to commit the
7 acts as herein alleged.

8 162. Alternatively, BioCardia is informed and believes and on that basis alleges that the
9 Shareholder Defendants knew or should have known that nVision and Ms. Sarna had acted in
10 violation of BioCardia's rights. Their investments in nVision were made "despite a known risk
11 that the conduct in question violate[d] the rights of [BioCardia]." Under California law and
12 Sections 51(3)(b) and 3 comment e, of the Restatement (Third) of Restitution and Unjust
13 Enrichment, their decision to invest in nVision despite that known risk of liability – i.e., despite
14 that "known unknown" – renders them "conscious wrongdoers" and places upon them the risk of
15 liability by a disgorgement measure.

16 163. BioCardia is informed and believes and on that basis alleges that the Shareholder
17 Defendants provided funding to nVision that was a substantial factor in enabling nVision and Ms.
18 Sarna to commit the acts as herein alleged, and that the Shareholder Defendants knowingly
19 benefited from the acts as herein alleged.

20 164. The Shareholder Defendants are required to disgorge to BioCardia the amount of
21 their unjust enrichment as a result of the acts alleged, including at least the amount Boston
22 Scientific paid the Shareholder Defendants for their shares of stock in nVision.

23 165. BioCardia is informed and believes and on that basis alleges that Fortis Advisors
24 LLC, as Stockholders' Representative, is holding in trust approximately ten percent (10%) of the
25 amount paid by Boston Scientific Corporation for the nVision stock of the Shareholder
26 Defendants, among other shareholders, resulting from their provision of funding to nVision that
27 was a substantial factor in enabling nVision and Ms. Sarna to commit the acts as herein alleged,
28 and therefore Fortis is required to disgorge to BioCardia the amount it holds in trust for the

1 Shareholder Defendants. The Shareholder Defendants are required to direct Fortis Advisors LLC
 2 to disgorge to BioCardia any amounts received from Boston Scientific Corporation that Fortis
 3 Advisors LLC is holding for the benefit of the Shareholder Defendants as a result of the
 4 Shareholders Defendants' unjust enrichment as a result of the acts alleged, including at least the
 5 amount Boston Scientific paid the Shareholder Defendants for their shares of stock in nVision.

6 166. As a further direct and proximate result of Ms. Sarna's breaches of the Sarna
 7 Agreement, Defendants have been unjustly enriched for example, in an amount equal to at least
 8 what Boston Scientific paid for nVision. Defendants have been enriched by Ms. Sarna's breaches
 9 of contract, reaping benefits they would not otherwise have achieved in the absence of the
 10 breaches. Defendants received benefits in the form of intellectual property and money based on
 11 Ms. Sarna's breaches of contract as alleged above. Defendants' retention of the benefits they
 12 received from Ms. Sarna's breaches of contract is unjust as Ms. Sarna was not contractually
 13 permitted to share these benefits with anyone else. As such, BioCardia is entitled to
 14 disgorgement of all of Defendants' profits and consequential gains reaped from their unjust
 15 enrichment, restitution based on the benefits received and a constructive trust over the unlawful
 16 benefits received as a result of Ms. Sarna's breaches of the Sarna Agreement.

17 167. In addition, a constructive trust should be imposed on nVision for the benefit of
 18 BioCardia on, among other things, (1) any monetary consideration paid by Boston Scientific and
 19 retained by nVision; (2) title to the '945 Provisional Application Family, the '120 Provisional
 20 Application Family, the '472 Application Family, and the Additional Provisional Applications
 21 and (3) the trade secrets and other intellectual property taken by Ms. Sarna, and nVision should
 22 be ordered to transfer or assign to BioCardia all of the forgoing.

23 **COUNT III**
 24 **(Misappropriation of Trade Secrets under California Uniform Trade Secrets Act Under**
 25 **California Civil Code Sections 3426 et seq**
(Against nVision and Imposition of Constructive Trust Against All Defendants)

26 168. BioCardia realleges paragraphs 1-167 inclusive.

27 **Elements of Trade Secret Claim**

28 169. A trade secret is "information, including a formula, pattern, compilation, program,

1 device, method, technique, or process, that: (1) Derives independent economic value, actual or
 2 potential, from not being generally known to the public or to other persons who can obtain
 3 economic value from its disclosure or use; and (2) Is the subject of efforts that are reasonable
 4 under the circumstances to maintain its secrecy.” Cal. Civ. Code § 3426.1(d).

5 170. To plead a claim for trade secret misappropriation, a plaintiff must allege: “(1) the
 6 plaintiff owned a trade secret, (2) the defendant acquired, disclosed, or used the plaintiff’s trade
 7 secret through improper means, and (3) the defendant’s actions damaged the plaintiff.” *Sargent*
 8 *Fletcher, Inc. v. Able Corp.*, 110 Cal. App. 4th 1658, 1665 (2003); *Space Data Corp. v. X*, 2017
 9 U.S. Dist. LEXIS 22571 at *3, 2017 WL 5013363 (N.D. Cal. Feb. 16, 2017). “Improper means”
 10 is defined as “theft, bribery, misrepresentation, breach or inducement of a breach of a duty to
 11 maintain secrecy, or espionage through electronic or other means.” Cal. Civ. Code. § 3426.1(a).

12 171. Courts distinguish between “direct” and “indirect” trade secret misappropriation,
 13 the difference being whether the defendant obtained the trade secrets directly from the plaintiff or
 14 indirectly “from someone other than plaintiff.” *See Heller v. Cepia, L.L.C.*, 2012 U.S. Dist.
 15 LEXIS 660 at *17, 2012 WL 13572 (N.D. Cal. Jan. 4, 2012). A claim for indirect trade secret
 16 misappropriation must allege facts showing that the defendant: “(a) knew or had reason to know
 17 before the use or disclosure that the information was a trade secret and knew or had reason to
 18 know that the disclosing party had acquired it through improper means or was breaching a duty of
 19 confidentiality by disclosing it; or (b) knew or had reason to know it was a trade secret and that
 20 the disclosure was a mistake.” *Cal. Police Activities League v. Cal. Police Youth Charities, Inc.*,
 21 2009 U.S. Dist. LEXIS 20507 at *8, 2009 WL 537091 (N.D. Cal. Mar. 3, 2009).

22 **The Statute of Limitations Was Tolled Until BioCardia Became Aware of nVision’s**
 23 **Misappropriation**

24 172. The statute of limitations for breach of a contractual obligation to preserve a trade
 25 secret does not start until the breach was, or reasonably should have been discovered. *See, e.g.,*
 26 *April Enterprises, Inc. v. KTTV*, 147 Cal.App.3d 827, 831 (1983). The reason for this is that it is
 27 often difficult or impractical for a trade secret owner to determine whether someone has
 28 misappropriated a trade secret. It would be inequitable for the statute of limitations to be

1 triggered by a breach, and even run, before the aggrieved party even realizes it has been harmed.

2 173. As more fully described in the discussion of “BioCardia’s First Awareness of Ms.
3 Sarna’s Breach of Contract and Misappropriation of Trade Secrets” above, during and after her
4 employment with BioCardia, Ms. Sarna and nVision concealed the trade secret misappropriation
5 from detection. For example, Ms. Sarna never informed BioCardia that she had incorporated
6 nVision Medical Corporation during her employment, or that nVision would develop a catheter
7 system that would compete with BioCardia’s efforts to adapt its catheter offerings for use in
8 gynecological applications. Ms. Sarna also never informed BioCardia that during her
9 employment she filed multiple provisional patent applications covering BioCardia trade secrets
10 described in the March 2000 lab notebook entry that Dr. Altman explained to Ms. Sarna in or
11 around May 2009 and assigned them to nVision.

12 174. Ms. Sarna’s and nVision’s fraudulent concealment of her wrongful acts tolled the
13 statute of limitations for BioCardia’s misappropriation claims. Therefore, the running of the
14 statute of limitations was delayed until January 2019, when BioCardia actually discovered the
15 fraudulent acts, because among other things, Ms. Sarna and nVision (a) concealed her
16 wrongdoing from BioCardia which (b) she was contractually obligated to disclose to BioCardia
17 (c) which concealment she did with the intent to defraud BioCardia (d) of which fraudulent acts
18 BioCardia was unaware until January 2019 and upon which BioCardia would have acted earlier
19 had it been earlier aware of them, causing BioCardia to sustain the damage alleged herein.

20 **Trade Secrets Disclosed During Meeting Between Dr. Altman and Surbhi Sarna**

21 175. **Diagnostic method of using a catheter inserted into a fallopian tube to obtain**
22 **a solid or liquid biopsy of potentially diseased ovarian tissue or cells by, for example,**
23 **advancing a guide catheter into the uterus to gain access to the ostium of a fallopian tube,**
24 **advancing a second catheter system through the guide catheter and obtaining a sample of**
25 **tissue through the second catheter that is from the ovary which may be analyzed**
26 **biologically:**

27 a. This diagnostic method is a trade secret because it is a method, technique,
28 or process, that derives actual or potential economic value from not being known and is

1 subject to reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a
2 method of using a catheter, which can equally be called a technique or process.

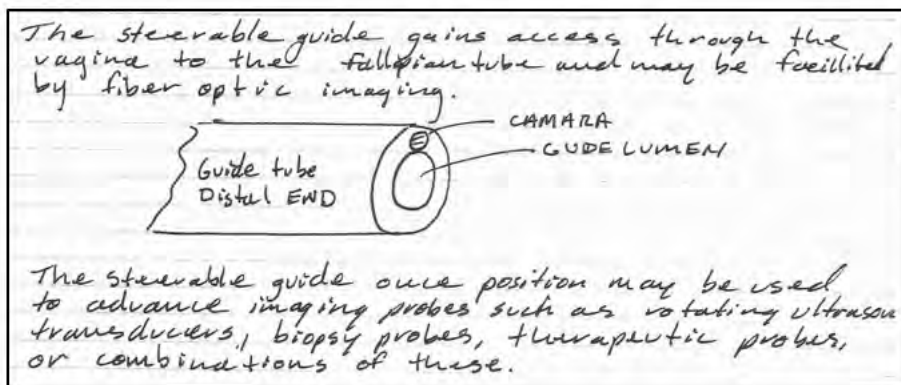
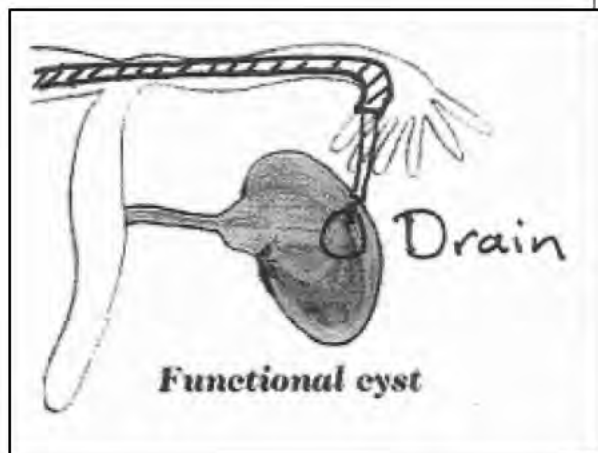
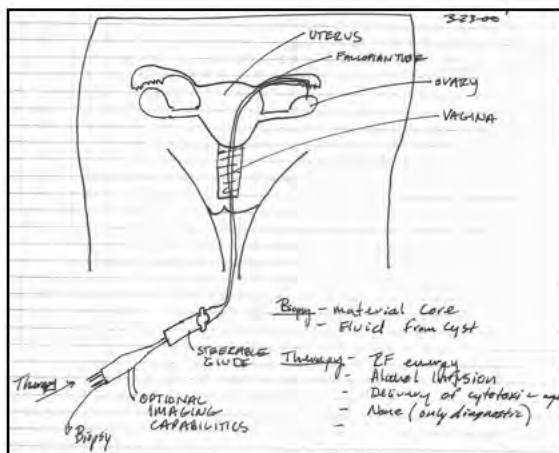
3 b. This trade secret derived both actual and potential value from not being
4 generally known to the public. For example, as Ms. Sarna set out in her 2013 presentation
5 on nVision, which BioCardia first reviewed in 2019, the addressable market for a non-
6 invasive method for early detection of ovarian cancer was \$4 billion and involved roughly
7 8 million patients per year. Dkt 1 at Ex. B at slide 29. In addition, Boston Scientific paid
8 \$275 million to purchase nVision based in part on its commercial development of this
9 trade secret.

10 c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade
11 secret. The only place where the secret was disclosed was in the March 2000 entry in Dr.
12 Altman's lab notebook. Dr. Altman kept this lab notebook in a secure location in his
13 office. Access to the notebook itself was restricted, and, prior to this litigation, only four
14 people had seen the contents of this notebook entry related to this disclosure: Daniel
15 Rosenman, Dr. Simon Stertzer, Dr. Peter Altman, and Ms. Sarna. Each of these people
16 entered into a non-disclosure agreement with BioCardia, or its predecessor Hippocratic
17 Engineering, to prevent disclosure to the public. Furthermore, BioCardia internal
18 documents containing confidential information were labelled "confidential" and all
19 documents containing BioCardia confidential information that were distributed externally
20 were marked "confidential." For example, BioCardia employees received, and BioCardia
21 lab notebooks came with, a BioCardia memo on "Lab Notebook Document Control" to
22 preserve secrecy. Finally, visitors to BioCardia had to sign-in to gain access to the
23 facilities and were escorted by a company employee at all times. BioCardia has never had
24 more than approximately twenty employees and an appropriately sized facility, so the
25 presence of an unauthorized person would be recognized.

26 d. BioCardia is the owner of this trade secret because the two individuals who
27 conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertzer, both
28 assigned all right, title, and interest in the intellectual property to BioCardia, or its

predecessor Hippocratic Engineering.

e. Dr. Peter Altman disclosed this trade secret to Ms. Sarna when he described and explained a March 2000 lab notebook entry to her during an hour-long meeting. The following excerpts are examples of disclosures from the notebook that describe this trade secret:



f. nVision directly misappropriated this trade secret by disclosing and using the trade secret through improper means. For example, Section 2 of Ms. Sarna's employment agreement with BioCardia required her to hold confidential information in the strictest confidence and not to use the information except for the benefit of BioCardia. For example, claim 1 of U.S. Patent No. 10,639,016 sets out all the components of this trade secret. Ms. Sarna's efforts to develop and commercialize the Mako also misappropriated this trade secret, since implementation of the Mako device such that the everting balloon at the distal end of the catheter is used to collect cells from the fallopian

1 tube practices this trade secret. Mako documentation, such as the instructions for use, also
2 disclose this trade secret since the documents describe using a catheter to collect a sample
3 of potentially diseased cells in the fallopian tube. BioCardia is informed and believes and
4 on that basis alleges that nVision also misappropriated this trade secret through improper
5 disclosure when, for example, it consulted with various physicians about the design,
6 development, or clinical trials for the Mako device. As a result, Ms. Sarna's actions to
7 acquire patents on this trade secret, develop and market the Mako device that implements
8 this trade secret, and disclose the trade secret to practitioners as part of the design and
9 development of the Mako product, all constitute misappropriation of this trade secret.

10 g. nVision directly and indirectly misappropriated this trade secret. For
11 example, nVision obtained this trade secret from Ms. Sarna. nVision knew Ms. Sarna was
12 an employee of BioCardia, a company that made catheter systems, and that Ms. Sarna
13 filed for patents on catheter systems while still employed at BioCardia. Another example
14 of nVision's misappropriation of this trade secret was the improper use and disclosure of
15 this trade secret through the design, development, and documentation of their version of
16 the Mako, a device called Cytuity. When Cytuity everts a balloon at the distal end of the
17 catheter to collect a sample of potentially diseased cells from the fallopian tube, it
18 practices this trade secret. Furthermore, Boston Scientific Corporation and Boston
19 Scientific Scimed developed documentation for Cytuity as a result of nVision's
20 misappropriation. *See, e.g.*, "Cytuity Directions For Use" Video available at
21 [https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--](https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--cell-collection-catheter/demo-video.html)
22 [cell-collection-catheter/demo-video.html](https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--cell-collection-catheter/demo-video.html) (disclosing BioCardia trade secrets by showing
23 an everted balloon at the distal end of the catheter collecting potentially diseased cells in
24 the fallopian tube for analysis). BioCardia is informed and believes and on that basis
25 alleges that nVision misappropriated this trade secret through improper disclosure when,
26 for example, it consulted with various physicians about the design, development, or
27 clinical trials (e.g., the nCYT trials) for the Cytuity device.

28 h. nVision's misappropriation damaged BioCardia. For example, because of

1 nVision's misappropriation, BioCardia missed out on the \$275 million valuation Boston
2 Scientific placed on the intellectual property. Furthermore, nVision's commercialization
3 of this trade secret prevented BioCardia from having a monopoly on the method, along
4 with the financial benefits that monopoly would confer.

5 176. **Diagnostic method of inserting a catheter with imaging capability, such as**
6 **cameras, fiber optics, or ultrasound imaging, on its distal end into a fallopian tube, by, for**
7 **example, advancing a guide catheter into the uterus to gain access to the ostium of a**
8 **fallopian tube, advancing a second catheter system through the guide catheter with**
9 **ultrasound imaging, to enable navigation and sampling for biologic analysis:**

10 a. This diagnostic method is a trade secret because it is a method, technique,
11 or process, that derives actual or potential economic value from not being known and is
12 subject to reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a
13 method of using a catheter, which can equally be called a technique or process.

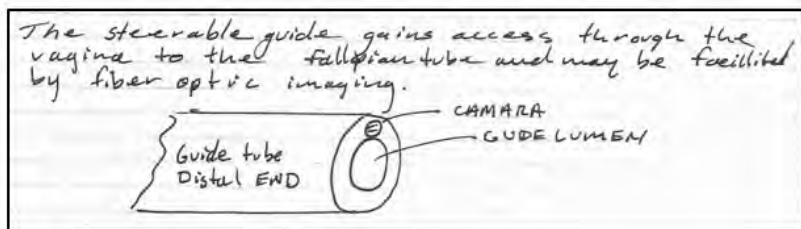
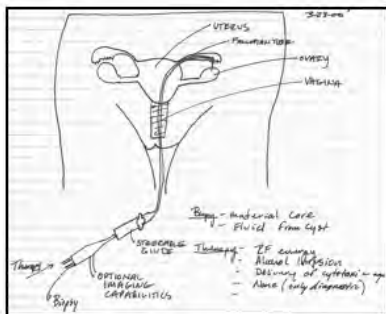
14 b. This trade secret derived both actual and potential value from not being
15 generally known to the public. For example, as Ms. Sarna set out in her 2013 presentation
16 on nVision, which BioCardia first reviewed in 2019, the addressable market for a non-
17 invasive method for early detection of ovarian cancer was \$4 billion and involved roughly
18 8 million patients per year. Dkt 1 at Ex. B at slide 29. In addition, Boston Scientific paid
19 \$275 million to purchase nVision based in part on its commercial development of this trade
20 secret.

21 c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade
22 secret. The only place where the secret was disclosed was in the March 2000 entry in Dr.
23 Altman's lab notebook. Dr. Altman kept this lab notebook in a secure location in his
24 office. Access to the notebook itself was restricted, and, prior to this litigation, only four
25 people had seen the contents of this notebook entry related to this disclosure: Daniel
26 Rosenman, Dr. Simon Stertzer, Dr. Peter Altman, and Ms. Sarna. Each of these people
27 entered into a non-disclosure agreement with BioCardia, or its predecessor Hippocratic
28 Engineering, to prevent disclosure to the public. Furthermore, BioCardia internal

documents containing confidential information were labelled “confidential” and all documents containing BioCardia confidential information that were distributed externally were marked “confidential.” For example, BioCardia employees received, and BioCardia lab notebooks came with, a BioCardia memo on “Lab Notebook Document Control” to preserve secrecy. Finally, visitors to BioCardia had to sign-in to gain access to the facilities and were escorted by a company employee at all times. BioCardia has never had more than approximately twenty employees and an appropriately sized facility, so the presence of an unauthorized person would be recognized.

d. BioCardia is the owner of this trade secret because the two individuals who conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertzer, both assigned all right, title, and interest in the intellectual property to BioCardia, or its predecessor Hippocratic Engineering.

e. Dr. Peter Altman disclosed this trade secret to Ms. Sarna when he described and explained a March 2000 lab notebook entry to her during an hour-long meeting. The following excerpts are examples of disclosures from the notebook that describe this trade secret:



f. Ms. Sarna and nVision directly misappropriated this trade secret by disclosing and using the trade secret through improper means. For example, Section 2 of Ms. Sarna’s employment agreement with BioCardia required her to hold confidential information in the strictest confidence and not to use the information except for the benefit of BioCardia. For example, claim 1 of PCT/US Patent Application No. 2012/022,619 sets out all the components of

1 this trade secret. nVision's efforts to develop and commercialize the Mako also misappropriated
2 this trade secret, since implementation of the Mako device utilizes imaging capability at the distal
3 end of the catheter as described in this trade secret. Mako documentation, such as the instructions
4 for use, also disclose this trade secret since the documents describe using a catheter with imaging
5 capability at the distal end of the catheter in a manner described in this trade secret. BioCardia is
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7 through improper disclosure when, for example, it consulted with various physicians about the
8 design, development, or clinical trials for the Mako device. As a result, Ms. Sarna's actions to
9 acquire patents on this trade secret and assign them to nVision, to develop and market the Mako
10 device that implements this trade secret, and disclose the trade secret to practitioners as part of the
11 design and development of the Mako product, all constitute misappropriation of this trade secret.

12 g. nVision directly and indirectly misappropriated this trade secret. For example,
13 nVision obtained this trade secret from Ms. Sarna and knew or should have known that the
14 information it obtained from Ms. Sarna was a trade secret acquired through improper means.
15 nVision knew Ms. Sarna was an employee of BioCardia, a company that made catheter systems,
16 and that Ms. Sarna filed for patents on catheter systems and assigned them while still employed at
17 BioCardia. Another example of nVision's misappropriation of this trade secret was the improper
18 use and disclosure of this trade secret through the design, development, and documentation of a
19 new version of the Mako, a device called Cytuity. Cytuity implements imaging capability at the
20 distal end of the catheter in the manner described in this trade secret. Furthermore,
21 documentation on Cytuity also misappropriated this trade secret through the improper disclosure
22 of the secret. *See, e.g.*, "Cytuity Directions For Use" Video available at
23 [https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--cell-](https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--cell-collection-catheter/demo-video.html)
24 [collection-catheter/demo-video.html](https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--cell-collection-catheter/demo-video.html) (disclosing BioCardia trade secrets by implementing
25 imaging capability in a manner described in this trade secret). BioCardia is informed and
26 believes and on that basis alleges that nVision misappropriated this trade secret through improper
27 disclosure when, for example, it consulted with various physicians about the design,
28 development, or clinical trials (e.g., the nCYT trials) for the Cytuity device.

1 h. nVision's misappropriation damaged BioCardia. For example, because of Ms.
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10 **capabilities to enable navigation and sampling for biologic analysis:**

11 a. This diagnostic method is a trade secret because it is a method, technique, or
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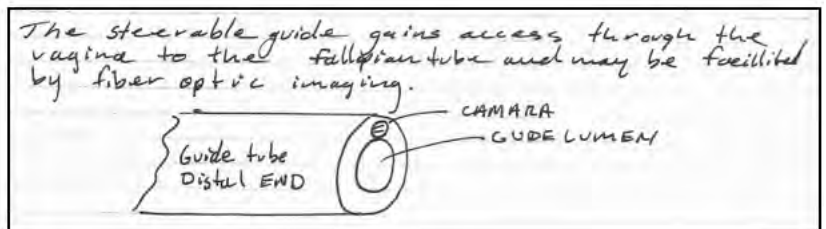
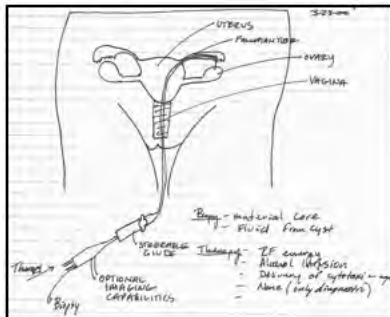
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18 early detection of ovarian cancer was \$4 billion and involved roughly 8 million patients per year.
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22 The only place where the secret was disclosed was in the March 2000 entry in Dr. Altman's lab
23 notebook. Dr. Altman kept this lab notebook in a secure location in his office. Access to the
24 notebook itself was restricted, and, prior to this litigation, only four people had seen the contents
25 of this notebook entry related to this disclosure: Daniel Rosenman, Dr. Simon Stertzer, Dr. Peter
26 Altman, and Ms. Sarna. Each of these people entered into a non-disclosure agreement with
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28 Furthermore, BioCardia internal documents containing confidential information were labelled

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d. BioCardia is the owner of this trade secret because the two individuals who conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertzer, both assigned all right, title, and interest in the intellectual property to BioCardia, or its predecessor Hippocratic Engineering.

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19 Furthermore, documentation developed for Cytuity also misappropriated this trade secret through
20 the improper disclosure of the secret. *See, e.g.*, "Cytuity Directions For Use" Video available at
21 [https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--cell-](https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--cell-collection-catheter/demo-video.html)
22 [collection-catheter/demo-video.html](https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--cell-collection-catheter/demo-video.html) (disclosing BioCardia trade secrets by implementing
23 imaging capability in a manner described in this trade secret). BioCardia is informed and
24 believes and on that basis alleges that nVision misappropriated this trade secret through improper
25 disclosure when, for example, it consulted with various physicians about the design,
26 development, or clinical trials (e.g., the nCYT trials) for the Cytuity device.

27 h. nVision's misappropriation damaged BioCardia. For example, because of
28 nVision's misappropriation, BioCardia missed out on the \$275 million valuation Boston

1 Scientific placed on the intellectual property. Furthermore, nVision's commercialization of this
2 trade secret prevented BioCardia from having a monopoly on the method, along with the financial
3 benefits that monopoly would confer.

4 178. **Diagnostic method of inserting a catheter with imaging capability, such as**
5 **cameras, fiber optics, or ultrasound imaging, on its distal end into a fallopian tube by, for**
6 **example, advancing a guide catheter into the uterus to gain access to the ostium of a**
7 **fallopian tube, advancing a second catheter system through the guide catheter, using the**
8 **imaging capabilities to enable navigation and imaging of ovarian cysts or tumors:**

9 a. This diagnostic method is a trade secret because it is a method, technique, or
10 process, that derives actual or potential economic value from not being known and is subject to
11 reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a method of using a
12 catheter, which can equally be called a technique or process.

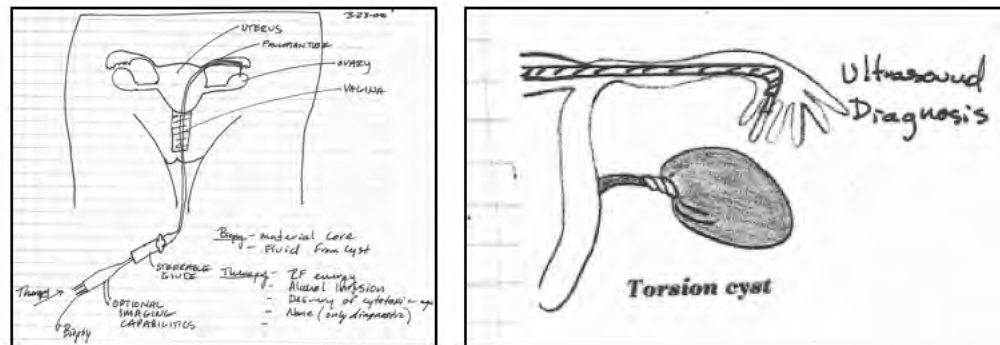
13 b. This trade secret derived both actual and potential value from not being generally
14 known to the public. For example, as Ms. Sarna set out in her 2013 presentation on nVision,
15 which BioCardia first reviewed in 2019, the addressable market for a non-invasive method for
16 early detection of ovarian cancer was \$4 billion and involved roughly 8 million patients per year.
17 Dkt 1 at Ex. B at slide 29. In addition, Boston Scientific paid \$275 million to purchase nVision
18 based in part on its commercial development of this trade secret.

19 c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade secret.
20 The only place where the secret was disclosed was in the March 2000 entry in Dr. Altman's lab
21 notebook. Dr. Altman kept this lab notebook in a secure location in his office. Access to the
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23 of this notebook entry related to this disclosure: Daniel Rosenman, Dr. Simon Stertzer, Dr. Peter
24 Altman, and Ms. Sarna. Each of these people entered into a non-disclosure agreement with
25 BioCardia, or its predecessor Hippocratic Engineering, to prevent disclosure to the public.
26 Furthermore, BioCardia internal documents containing confidential information were labelled
27 "confidential" and all documents containing BioCardia confidential information that were
28 distributed externally were marked "confidential." For example, BioCardia employees received,

and BioCardia lab notebooks came with, a BioCardia memo on “Lab Notebook Document Control” to preserve secrecy. Finally, visitors to BioCardia had to sign-in to gain access to the facilities and were escorted by a company employee at all times. BioCardia has never had more than approximately twenty employees and an appropriately sized facility, so the presence of an unauthorized person would be recognized.

d. BioCardia is the owner of this trade secret because the two individuals who conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertzer, both assigned all right, title, and interest in the intellectual property to BioCardia, or its predecessor Hippocratic Engineering.

e. Dr. Peter Altman disclosed this trade secret to Ms. Sarna when he described and explained a March 2000 lab notebook entry to her during an hour-long meeting. The following excerpts are examples of disclosures from the notebook that describe this trade secret:



f. Ms. Sarna and nVision directly misappropriated this trade secret by disclosing and using the trade secret through improper means. For example, Section 2 of Ms. Sarna’s employment agreement with BioCardia required her to hold confidential information in the strictest confidence and not to use the information except for the benefit of BioCardia. For example, claim 1 of PCT/US Patent Application No. 2012/022,619 sets out all the components of this trade secret. nVision’s efforts to develop and commercialize the Mako also misappropriated this trade secret, since implementation of the Mako device utilizes imaging capability at the distal end of the catheter as described in this trade secret. Mako documentation, such as the instructions for use, also disclose this trade secret since the documents describe using a catheter with imaging capability at the distal end of the catheter in a manner described in this trade secret. BioCardia is

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2 through improper disclosure when, for example, it consulted with various physicians about the
3 design, development, or clinical trials for the Mako device. As a result, Ms. Sarna's actions to
4 acquire patents on this trade secret and assign them to nVision, to develop and market the Mako
5 device that implements this trade secret, and disclose the trade secret to practitioners as part of the
6 design and development of the Mako product, all constitute misappropriation of this trade secret.

7 g. nVision directly and indirectly misappropriated this trade secret. For example,
8 nVision obtained this trade secret from Ms. Sarna and knew or should have known that the
9 information it obtained from Ms. Sarna was a trade secret acquired through improper means.
10 nVision knew Ms. Sarna was an employee of BioCardia, a company that made catheter systems,
11 and that Ms. Sarna filed for patents on catheter systems and assigned them to nVision while still
12 employed at BioCardia. Another example of nVision's misappropriation of this trade secret was
13 the improper use and disclosure of this trade secret through the design, development, and
14 documentation of a new version of the Mako, a device called Cytuity. Cytuity implements
15 imaging capability at the distal end of the catheter in the manner described in this trade secret.
16 Furthermore, documentation developed for Cytuity also misappropriated this trade secret through
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19 [collection-catheter/demo-video.html](https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--cell-collection-catheter/demo-video.html) (disclosing BioCardia trade secrets by implementing
20 imaging capability in a manner described in this trade secret). BioCardia is informed and
21 believes and on that basis alleges that nVision through improper disclosure when, for example, it
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28 benefits that monopoly would confer.

179. **Diagnostic method of inserting a catheter with imaging capability, such as cameras, fiber optics, or ultrasound imaging, on its distal end into a fallopian tube, by, for example, advancing a guide catheter into the uterus to gain access to the ostium of a fallopian tube, advancing a second catheter system through the guide catheter, using the imaging capability to enable navigation and imaging of ovarian cysts or tumors:**

a. This diagnostic method is a trade secret because it is a method, technique, or process, that derives actual or potential economic value from not being known and is subject to reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a method of using a catheter, which can equally be called a technique or process.

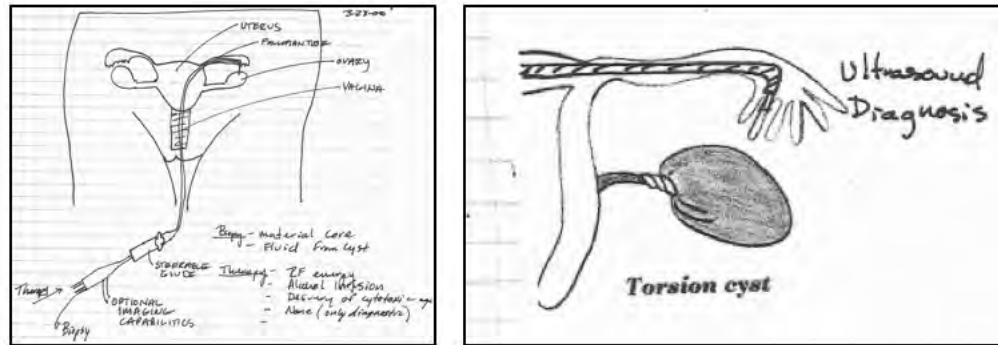
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c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade secret. The only place where the secret was disclosed was in the March 2000 entry in Dr. Altman's lab notebook. Dr. Altman kept this lab notebook in a secure location in his office. Access to the notebook itself was restricted, and, prior to this litigation, only four people had seen the contents of this notebook entry related to this disclosure: Daniel Rosenman, Dr. Simon Stertz, Dr. Peter Altman, and Ms. Sarna. Each of these people entered into a non-disclosure agreement with BioCardia, or its predecessor Hippocratic Engineering, to prevent disclosure to the public. Furthermore, BioCardia internal documents containing confidential information were labelled "confidential" and all documents containing BioCardia confidential information that were distributed externally were marked "confidential." For example, BioCardia employees received, and BioCardia lab notebooks came with, a BioCardia memo on "Lab Notebook Document Control" to preserve secrecy. Finally, visitors to BioCardia had to sign-in to gain access to the facilities and were escorted by a company employee at all times. BioCardia has never had more

than approximately twenty employees and an appropriately sized facility, so the presence of an unauthorized person would be recognized.

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1 acquire patents on this trade secret and assign them to nVision, to develop and market the Mako
 2 device that implements this trade secret, and disclose the trade secret to practitioners as part of the
 3 design and development of the Mako product, all constitute misappropriation of this trade secret.

4 g. nVision directly and indirectly misappropriated this trade secret. For example,
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 6 information it obtained from Ms. Sarna was a trade secret acquired through improper means.
 7 nVision knew Ms. Sarna was an employee of BioCardia, a company that made catheter systems,
 8 and that Ms. Sarna filed for patents on catheter systems and assigned them to nVision while still
 9 employed at BioCardia. Another example of nVision's misappropriation of this trade secret was
 10 the improper use and disclosure of this trade secret through the design, development, and
 11 documentation of a new version of the Mako, a device called Cytuity. Cytuity implements
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 13 Furthermore, documentation for Cytuity also misappropriated this trade secret through the
 14 improper disclosure of the secret. *See, e.g.*, "Cytuity Directions For Use" Video available at
 15 [https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--cell-](https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--cell-collection-catheter/demo-video.html)
 16 [collection-catheter/demo-video.html](https://www.bostonscientific.com/content/gwc/en-US/products/cell-collection/cytuity--cell-collection-catheter/demo-video.html) (disclosing BioCardia trade secrets by implementing
 17 imaging capability in a manner described in this trade secret). BioCardia is informed and
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 19 disclosure when, for example, it consulted with various physicians about the design,
 20 development, or clinical trials (e.g., the nCYT trials) for the Cytuity device.

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 24 trade secret prevented BioCardia from having a monopoly on the method, along with the financial
 25 benefits that monopoly would confer.

26 180. **Diagnostic method of inserting a catheter imaging capability, such as**
 27 **cameras, fiber optics, or ultrasound imaging, on its distal end into a fallopian tube by, for**
 28 **example, advancing a guide catheter into the uterus to gain access to the ostium of a**

1 **fallopian tube, advancing a second catheter system through the guide catheter with**
2 **ultrasound imaging, to enable navigation and imaging of an ovarian cyst or tumor, and to**
3 **take an action selected from the set of (1) characterizing said cyst or said tumor or (2)**
4 **planning therapeutic intervention of said cysts and said tumors:**

5 a. This diagnostic method is a trade secret because it is a method, technique, or
6 process, that derives actual or potential economic value from not being known and is subject to
7 reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a method of using a
8 catheter, which can equally be called a technique or process.

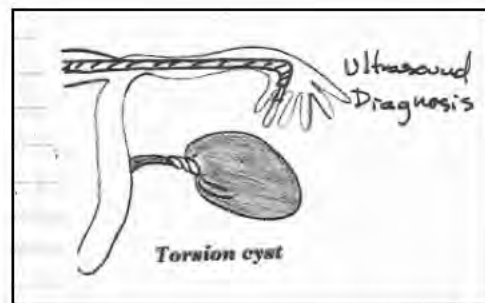
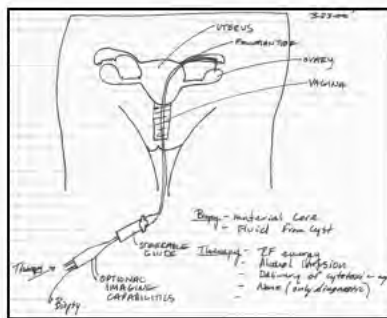
9 b. This trade secret derived both actual and potential value from not being generally
10 known to the public. For example, as Ms. Sarna set out in her 2013 presentation on nVision,
11 which BioCardia first reviewed in 2019, the addressable market for a non-invasive method for
12 early detection of ovarian cancer was \$4 billion and involved roughly 8 million patients per year.
13 Dkt 1 at Ex. B at slide 29. In addition, Boston Scientific paid \$275 million to purchase nVision
14 based in part on its commercial development of this trade secret.

15 c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade secret.
16 The only place where the secret was disclosed was in the March 2000 entry in Dr. Altman's lab
17 notebook. Dr. Altman kept this lab notebook in a secure location in his office. Access to the
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27 facilities and were escorted by a company employee at all times. BioCardia has never had more
28 than approximately twenty employees and an appropriately sized facility, so the presence of an

1 unauthorized person would be recognized.

2 d. BioCardia is the owner of this trade secret because the two individuals who
3 conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertzer, both assigned
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5 Engineering.

6 e. Dr. Peter Altman disclosed this trade secret to Ms. Sarna when he described and
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8 excerpts are examples of disclosures from the notebook that describe this trade secret:



9
10
11
12
13
14
15 A fluid biopsy probe, such as a hollow helical needle
16 may be rotated into the ovary to obtain a
17 sample of the cyst. Such a probe could also be
18 used to drain the cyst. Such a probe could also
be used to deliver RF energy to kill tissue
in the cyst, or to deliver alcohol or cytotoxic
agents designed to introduce necrosis locally.

19 f. nVision directly misappropriated this trade secret by disclosing and using the trade
20 secret through improper means. nVision obtained this trade secret from Ms. Sarna and knew or
21 should have known that the information it obtained from Ms. Sarna was a trade secret acquired
22 through improper means. For example, claim 1 of U.S. Patent No. 10,639,016 sets out all the
23 components of this trade secret. nVision's efforts to develop and commercialize the Mako also
24 misappropriated this trade secret, since, for example, implementation of the Mako device means
25 using imaging capability to sample tissue in the fallopian tube to characterize the ovarian state.
26 Mako documentation, such as the instructions for use, also disclose this trade secret since the
27 documents describe using a catheter to collect a sample of cells in the fallopian tube to determine
28

1 ovarian state. BioCardia is informed and believes and on that basis alleges that nVision also
2 misappropriated this trade secret through improper disclosure when, for example, it consulted
3 with various physicians about the design, development, or clinical trials for the Mako device. As
4 a result, nVision's development and marketing of the Mako device that implements this trade
5 secret, and disclose the trade secret to practitioners as part of the design and development of the
6 Mako product, all constitute misappropriation of this trade secret.

7 g. nVision directly and indirectly misappropriated this trade secret. nVision obtained
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12 Another example of nVision's misappropriation of this trade secret was the improper use and
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14 version of the Mako, a device called Cytuity. When Cytuity uses imaging capability to help
15 collect a sample from the fallopian tube to determine ovarian state, it practices this trade secret.
16 Furthermore, documentation developed for Cytuity also misappropriated this trade secret through
17 the improper disclosure of the secret. *See, e.g.*, "Cytuity Directions For Use" Video available at
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20 using imaging capabilities to navigate a fallopian tube to collect a sample to determine ovarian
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25 h. nVision's misappropriation damaged BioCardia. For example, because of
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181. **Diagnostic method of inserting a catheter imaging capability, such as cameras, fiber optics, or ultrasound imaging, on its distal end into a fallopian tube by, for example, advancing a guide catheter into the uterus to gain access to the ostium of a fallopian tube, advancing a second catheter system through the guide catheter with imaging capability to enable navigation and imaging of ovarian cysts or tumors and to take an action selected from the set of (1) characterizing said cyst or said tumor or (2) planning therapeutic intervention of said cysts and said tumors:**

a. This diagnostic method is a trade secret because it is a method, technique, or process, that derives actual or potential economic value from not being known and is subject to reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a method of using a catheter, which can equally be called a technique or process.

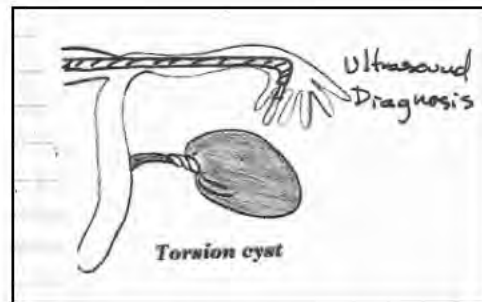
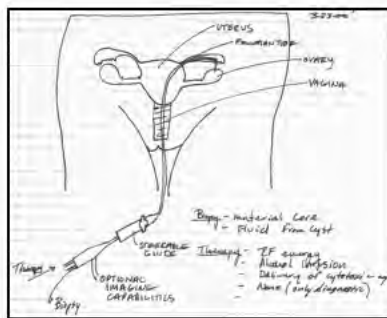
b. This trade secret derived both actual and potential value from not being generally known to the public. For example, as Ms. Sarna set out in her 2013 presentation on nVision, which BioCardia first reviewed in 2019, the addressable market for a non-invasive method for early detection of ovarian cancer was \$4 billion and involved roughly 8 million patients per year. Dkt 1 at Ex. B at slide 29. In addition, Boston Scientific paid \$275 million to purchase nVision based in part on its commercial development of this trade secret.

c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade secret. The only place where the secret was disclosed was in the March 2000 entry in Dr. Altman's lab notebook. Dr. Altman kept this lab notebook in a secure location in his office. Access to the notebook itself was restricted, and, prior to this litigation, only four people had seen the contents of this notebook entry related to this disclosure: Daniel Rosenman, Dr. Simon Stertz, Dr. Peter Altman, and Ms. Sarna. Each of these people entered into a non-disclosure agreement with BioCardia, or its predecessor Hippocratic Engineering, to prevent disclosure to the public. Furthermore, BioCardia internal documents containing confidential information were labelled "confidential" and all documents containing BioCardia confidential information that were distributed externally were marked "confidential." For example, BioCardia employees received,

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A fluid biopsy probe, such as a hollow helical needle may be rotated into the ovary to obtain a sample of the cyst. Such a probe could also be used to drain the cyst. Such a probe could also be used to deliver RF energy to kill tissue in the cyst, or to deliver alcohol or cytotoxic agents designed to introduce necrosis locally.

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182. **Diagnostic method and devices for advancing a tissue-sampling element to the fallopian tube, fimbria, or ovary to take a solid or fluid tissue sample, by, for example,**

1 **advancing a guide catheter into the uterus to gain access to the ostium of a fallopian tube,**
2 **advancing a second catheter system having a tissue-sampling element through the guide**
3 **catheter and advancing the tissue-sampling element to obtain a liquid or solid sample for**
4 **biologic analysis:**

5 a. This diagnostic method is a trade secret because it is a method, technique, or
6 process, that derives actual or potential economic value from not being known, and is subject to
7 reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a method of using a
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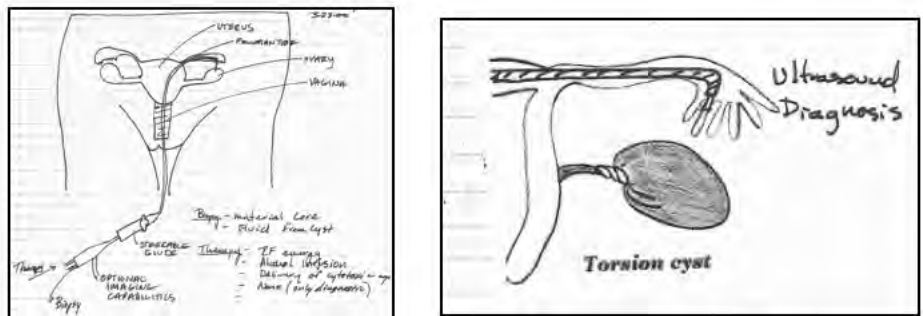
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f. nVision directly misappropriated this trade secret by disclosing this trade secret in claim 1 of U.S. Patent No. 10,639,016, which sets out all the components of this trade secret. nVision's efforts to develop and commercialize the Mako also misappropriated this trade secret, since implementation of the Mako device, such that the everting balloon at the distal end of the catheter is used to collect cells from the fallopian tube, practices this trade secret. Mako documentation, such as the instructions for use, also disclose this trade secret since the documents describe using a catheter to collect a sample of potentially diseased cells in the fallopian tube. BioCardia is informed and believes and on that basis alleges that, nVision also misappropriated this trade secret through improper disclosure when, for example, its President, Ms. Sarna, consulted with various physicians about the design, development, or clinical trials for the Mako

1 device. As a result, nVision's actions to acquire patents on this trade secret, develop and market
 2 the Mako device that implements this trade secret, and disclose the trade secret to practitioners as
 3 part of the design and development of the Mako product, all constitute misappropriation of this
 4 trade secret.

5 h. nVision's misappropriation damaged BioCardia. For example, because of
 6 nVision's misappropriation, BioCardia missed out on the \$275 million valuation Boston
 7 Scientific placed on the intellectual property. Furthermore, nVision's commercialization of this
 8 trade secret prevented BioCardia from having a monopoly on the method, along with the financial
 9 benefits that monopoly would confer.

10 183. **Diagnostic method and devices to be used for tissue-sampling from the**
 11 **fallopian tube, fimbria, or ovary by taking a solid or fluid tissue sample, by, for example,**
 12 **advancing a guide catheter into the uterus to gain access to the ostium of a fallopian tube,**
 13 **advancing a second catheter system having a penetrating element through the guide**
 14 **catheter and advancing the penetrating element consisting of a hollow helical needle into the**
 15 **fallopian tube, fimbria, or ovary to obtain a liquid or solid sample for biologic analysis:**

16 a. This diagnostic method is a trade secret because it is a method, technique, or
 17 process, that derives actual or potential economic value from not being known, and is subject to
 18 reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a method of using a
 19 catheter, which can equally be called a technique or process.

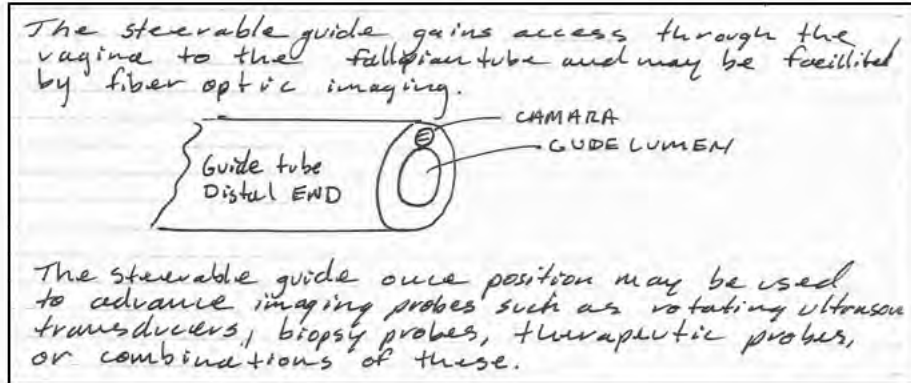
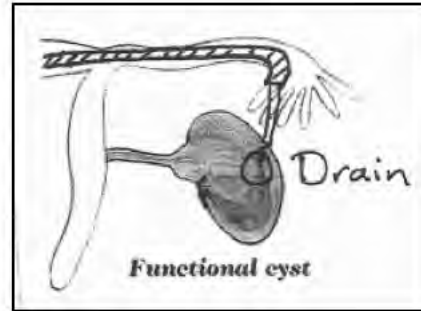
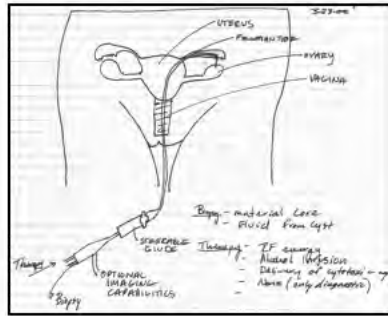
20 b. This trade secret derived both actual and potential value from not being generally
 21 known to the public. For example, as Ms. Sarna set out in her 2013 presentation on nVision,
 22 which BioCardia first reviewed in 2019, the addressable market for a non-invasive method for
 23 early detection of ovarian cancer was \$4 billion and involved roughly 8 million patients per year.
 24 Dkt 1 at Ex. B at slide 29. In addition, Boston Scientific paid \$275 million to purchase nVision
 25 based in part on its commercial development of this trade secret.

26 c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade secret.
 27 The only place where the secret was disclosed was in the March 2000 entry in Dr. Altman's lab
 28 notebook. Dr. Altman kept this lab notebook in a secure location in his office. Access to the

1 notebook itself was restricted, and, prior to this litigation, only four people had seen the contents
2 of this notebook entry related to this disclosure: Daniel Rosenman, Dr. Simon Stertz, Dr. Peter
3 Altman, and Ms. Sarna. Each of these people entered into a non-disclosure agreement with
4 BioCardia, or its predecessor Hippocratic Engineering, to prevent disclosure to the public.
5 Furthermore, BioCardia internal documents containing confidential information were labelled
6 “confidential” and all documents containing BioCardia confidential information that was released
7 externally were marked “confidential.” For example, BioCardia employees received, and
8 BioCardia lab notebooks came with, a BioCardia memo on “Lab Notebook Document Control” to
9 preserve secrecy. Finally, visitors to BioCardia had to sign-in to gain access to the facilities and
10 were escorted by a company employee at all times. BioCardia has only ever had approximately
11 twenty employees and an appropriately sized facility, so the presence of an unauthorized person
12 would be recognized.

13 d. BioCardia is the owner of this trade secret because the two individuals who
14 conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertz, both assigned
15 all right, title, and interest in the intellectual property to BioCardia, or its predecessor Hippocratic
16 Engineering.

17 e. Dr. Peter Altman disclosed this trade secret to Ms. Sarna when he described and
18 explained a March 2000 lab notebook entry to her during an hour-long meeting. The following
19 excerpts are examples of disclosures from the notebook that describe this trade secret:
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f. nVision directly misappropriated this trade secret by disclosing and using the trade secret through improper means. For example, claim 1 of U.S. Patent No. 10,639,016 sets out all the components of this trade secret. nVision's efforts to develop and commercialize the Mako also misappropriated this trade secret, since implementation of the Mako device, such that the everting balloon at the distal end of the catheter is used to collect cells from the fallopian tube, practices this trade secret. Mako documentation, such as the instructions for use, also disclose this trade secret since the documents describe using a catheter to collect a sample of potentially diseased cells in the fallopian tube. BioCardia is informed and believes and on that basis alleges that nVision also misappropriated this trade secret through improper disclosure when, for example, nVision consulted with various physicians about the design, development, or clinical trials for the Mako device. As a result, nVision's actions to acquire patents on this trade secret, develop and market the Mako device that implements this trade secret, and disclose the trade secret to practitioners as part of the design and development of the Mako product, all constitute misappropriation of this trade secret.

h. nVision's misappropriation damaged BioCardia. For example, because of

nVision's misappropriation, BioCardia missed out on the \$275 million valuation Boston Scientific placed on the intellectual property. Furthermore, nVision's commercialization of this trade secret prevented BioCardia from having a monopoly on the method, along with the financial benefits that monopoly would confer.

184. **Diagnostic method and devices to be used for tissue-sampling from the fallopian tube, fimbria, or ovary by taking a solid or fluid tissue sample, by, for example, advancing a guide catheter into the uterus to gain access to the ostium of a fallopian tube, advancing a second catheter system having a tissue-sampling element through the guide catheter and advancing the tissue-sampling element into the fallopian tube, fimbria, or ovary to obtain a liquid or solid sample for biologic analysis:**

a. This diagnostic method is a trade secret because it is a method, technique, or process, that derives actual or potential economic value from not being known, and is subject to reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a method of using a catheter, which can equally be called a technique or process.

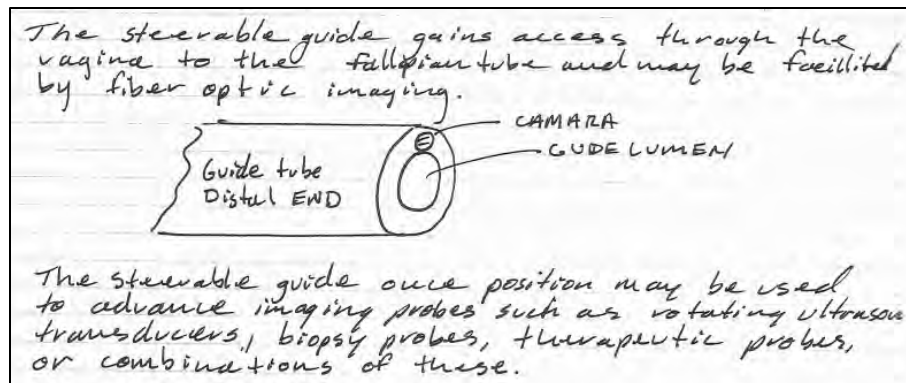
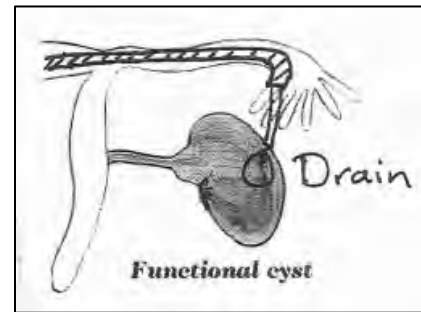
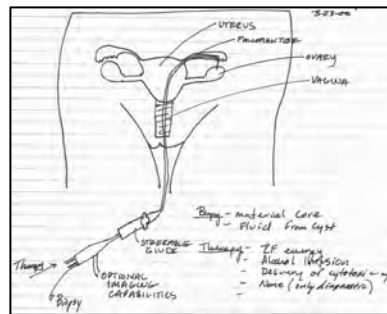
b. This trade secret derived both actual and potential value from not being generally known to the public. For example, as Ms. Sarna set out in her 2013 presentation on nVision, which BioCardia first reviewed in 2019, the addressable market for a non-invasive method for early detection of ovarian cancer was \$4 billion and involved roughly 8 million patients per year. Dkt 1 at Ex. B at slide 29. In addition, Boston Scientific paid \$275 million to purchase nVision based in part on its commercial development of this trade secret.

c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade secret. The only place where the secret was disclosed was in the March 2000 entry in Dr. Altman's lab notebook. Dr. Altman kept this lab notebook in a secure location in his office. Access to the notebook itself was restricted, and, prior to this litigation, only four people had seen the contents of this notebook entry related to this disclosure: Daniel Rosenman, Dr. Simon Stertzer, Dr. Peter Altman, and Ms. Sarna. Each of these people entered into a non-disclosure agreement with BioCardia, or its predecessor Hippocratic Engineering, to prevent disclosure to the public. Furthermore, BioCardia internal documents containing confidential information were labelled

“confidential” and all documents containing BioCardia confidential information that was released externally were marked “confidential.” For example, BioCardia employees received, and BioCardia lab notebooks came with, a BioCardia memo on “Lab Notebook Document Control” to preserve secrecy. Finally, visitors to BioCardia had to sign-in to gain access to the facilities and were escorted by a company employee at all times. BioCardia has only ever had approximately twenty employees and an appropriately sized facility, so the presence of an unauthorized person would be recognized.

d. BioCardia is the owner of this trade secret because the two individuals who conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertzer, both assigned all right, title, and interest in the intellectual property to BioCardia, or its predecessor Hippocratic Engineering.

e. Dr. Peter Altman disclosed this trade secret to Ms. Sarna when he described and explained a March 2000 lab notebook entry to her during an hour-long meeting. The following excerpts are examples of disclosures from the notebook that describe this trade secret:



f. nVision misappropriated this trade secret by disclosing and using the trade secret

through improper means. For example, claim 1 of U.S. Patent No. 10,639,016 sets out all the components of this trade secret. nVision's efforts to develop and commercialize the Mako also misappropriated this trade secret, since implementation of the Mako device, such that the everting balloon at the distal end of the catheter is used to collect cells from the fallopian tube, practices this trade secret. Mako documentation, such as the instructions for use, also disclose this trade secret since the documents describe using a catheter to collect a sample of potentially diseased cells in the fallopian tube. BioCardia is informed and believes and on that basis alleges that nVision also misappropriated this trade secret through improper disclosure when, for example, nVision consulted with various physicians about the design, development, or clinical trials for the Mako device. As a result, nVision's actions to acquire patents on this trade secret, develop and market the Mako device that implements this trade secret, and disclose the trade secret to practitioners as part of the design and development of the Mako product, all constitute misappropriation of this trade secret.

g. nVision's misappropriation damaged BioCardia. For example, because of nVision's misappropriation, BioCardia missed out on the \$275 million valuation Boston Scientific placed on the intellectual property. Furthermore, nVision's commercialization of this trade secret prevented BioCardia from having a monopoly on the method, along with the financial benefits that monopoly would confer.

185. **Therapeutic method of inserting a catheter with imaging capability, such as cameras, fiber optics, or ultrasound imaging, on its distal end into a fallopian tube to advance a therapy, by, for example, advancing a guide catheter into the uterus to gain access to the ostium of a fallopian tube, advancing a second catheter system through the guide catheter with imaging capability, to enable navigation and imaging of an ovarian cyst or tumor, and to take an action selected from the set of (1) ablating regions of the ovary, (2) delivering controlled release drug delivery matrices to relevant tissue in and around the ovary, or (3) draining the tissue mass penetrated by the hollow penetrating element:**

a. This therapeutic method is a trade secret because it is a method, technique, or process, that derives actual or potential economic value from not being known, and is subject to

1 reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a method of using a
2 catheter, which can equally be called a technique or process.

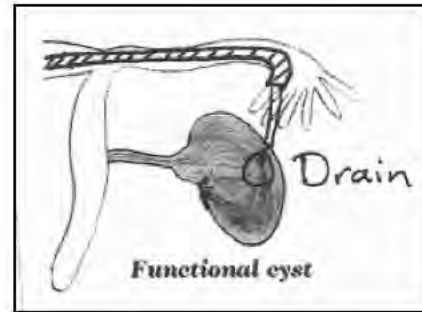
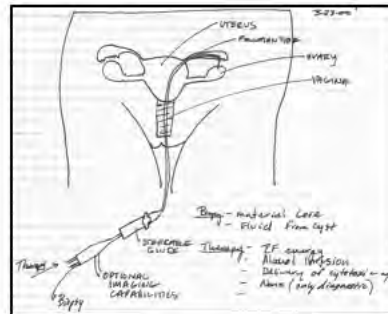
3 b. This trade secret derived both actual and potential value from not being generally
4 known to the public. For example, as Ms. Sarna set out in her 2013 presentation on nVision,
5 which BioCardia first reviewed in 2019, the addressable market for a non-invasive method for
6 early detection of ovarian cancer was \$4 billion and involved roughly 8 million patients per year.
7 Dkt 1 at Ex. B at slide 29. In addition, Boston Scientific paid \$275 million to purchase nVision
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10 The only place where the secret was disclosed was in the March 2000 entry in Dr. Altman's lab
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23 would be recognized.

24 d. BioCardia is the owner of this trade secret because the two individuals who
25 conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertz, both assigned
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explained a March 2000 lab notebook entry to her during an hour-long meeting. The following excerpts are examples of disclosures from the notebook that describe this trade secret:



A fluid biopsy probe, such as a hollow helical needle may be rotated into the ovary to obtain a sample of the cyst. Such a probe could also be used to drain the cyst. Such a probe could also be used to deliver RF energy to kill tissue in the cyst, or to deliver alcohol or cytotoxic agents designed to introduce necrosis locally.

The steerable guide gains access through the vagina to the fallopian tube and may be facilitated by fiber optic imaging.



The steerable guide once position may be used to advance imaging probes such as rotating ultrasound transducers, biopsy probes, therapeutic probes, or combinations of these.

f. nVision directly misappropriated this trade secret by disclosing and using the trade secret through improper means. For example, claim 1 of U.S. Patent No. 10,639,016 sets out all the components of this trade secret. nVision's efforts to develop and commercialize the Mako also misappropriated this trade secret, since implementation of the Mako device, such that the everting balloon at the distal end of the catheter is used to collect cells from the fallopian tube, practices this trade secret. Mako documentation, such as the instructions for use, also disclose this trade secret since the documents describe using a catheter to collect a sample of potentially diseased cells in the fallopian tube. BioCardia is informed and believes and on that basis alleges that nVision also misappropriated this trade secret through improper disclosure when, for example, it consulted with various physicians about the design, development, or clinical trials for

the Mako device. As a result, nVision's actions to acquire patents on this trade secret, develop and market the Mako device that implements this trade secret, and disclose the trade secret to practitioners as part of the design and development of the Mako product, all constitute misappropriation of this trade secret.

h. nVision's misappropriation damaged BioCardia. For example, because of nVision's misappropriation, BioCardia missed out on the \$275 million valuation Boston Scientific placed on the intellectual property. Furthermore, Ms. Sarna's and Boston Scientific's commercialization of this trade secret prevented BioCardia from having a monopoly on the method, along with the financial benefits that monopoly would confer.

186. **Therapeutic method of inserting a catheter with imaging, such as cameras, fiber optics, or ultrasound imaging, on its distal end into a fallopian tube to advance a therapy, by, for example, advancing a guide catheter into the uterus to gain access to the ostium of a fallopian tube, advancing a second catheter system through the guide catheter with ultrasound imaging, to enable navigation and imaging of an ovarian cyst or tumor, and to take an action selected from the set of (1) ablating regions of the ovary using radiofrequency energy or (2) ablating the regions of the ovary by the delivery of alcohol:**

a. This therapeutic method is a trade secret because it is a method, technique, or process, that derives actual or potential economic value from not being known, and is subject to reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a method of using a catheter, which can equally be called a technique or process.

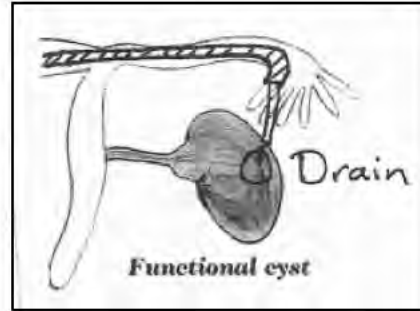
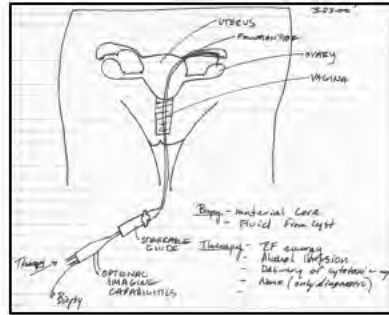
b. This trade secret derived both actual and potential value from not being generally known to the public. For example, as Ms. Sarna set out in her 2013 presentation on nVision, which BioCardia first reviewed in 2019, the addressable market for a non-invasive method for early detection of ovarian cancer was \$4 billion and involved roughly 8 million patients per year. Dkt 1 at Ex. B at slide 29. In addition, Boston Scientific paid \$275 million to purchase nVision based in part on its commercial development of this trade secret.

c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade secret. The only place where the secret was disclosed was in the March 2000 entry in Dr. Altman's lab

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12 twenty employees and an appropriately sized facility, so the presence of an unauthorized person
13 would be recognized.

14 d. BioCardia is the owner of this trade secret because the two individuals who
15 conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertz, both assigned
16 all right, title, and interest in the intellectual property to BioCardia, or its predecessor Hippocratic
17 Engineering.

18 e. Dr. Peter Altman disclosed this trade secret to Ms. Sarna when he described and
19 explained a March 2000 lab notebook entry to her during an hour-long meeting. The following
20 excerpts are examples of disclosures from the notebook that describe this trade secret:
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A fluid biopsy probe, such as a hollow helical needle may be rotated into the ovary to obtain a sample of the cyst. Such a probe could also be used to drain the cyst. Such a probe could also be used to deliver RF energy to kill tissue in the cyst, or to deliver alcohol or cytotoxic agents designed to introduce necrosis locally.

The steerable guide gains access through the vagina to the fallopian tube and may be facilitated by fiber optic imaging.



The steerable guide once positioned may be used to advance imaging probes such as rotating ultrasound transducers, biopsy probes, therapeutic probes, or combinations of these.

f. nVision directly misappropriated this trade secret by disclosing and using the trade secret through improper means. For example, claim 1 of PCT/US Patent Application No. 2012/022,619 sets out all the components of this trade secret. nVision's efforts to develop and commercialize the Mako also misappropriated this trade secret, since implementation of the Mako device utilizes imaging capability at the distal end of the catheter as described in this trade secret. Mako documentation, such as the instructions for use, also disclose this trade secret since the documents describe using a catheter with imaging capability at the distal end of the catheter in a manner described in this trade secret. BioCardia is informed and believes and on that basis alleges that nVision also misappropriated this trade secret through improper disclosure when, for example, nVision consulted with various physicians about the design, development, or clinical trials for the Mako device. As a result, nVision's actions to acquire patents on this trade secret, develop and market the Mako device that implements this trade secret, and disclose the trade secret to practitioners as part of the design and development of the Mako product, all constitute

1 misappropriation of this trade secret.

2 h. nVision's misappropriation damaged BioCardia. For example, because of
3 nVision's misappropriation, BioCardia missed out on the \$275 million valuation Boston
4 Scientific placed on the intellectual property. Furthermore, nVision's commercialization of this
5 trade secret prevented BioCardia from having a monopoly on the method, along with the financial
6 benefits that monopoly would confer.

7 187. **Therapeutic method and devices to be used through the vagina, uterus, and**
8 **fallopian tube to advance a hollow element from a catheter to assist with tissue sampling,**
9 **where, for example, the hollow element is connected to a fluid conduit within the catheter**
10 **system that is connected to a reservoir outside of the body:**

11 a. This therapeutic method is a trade secret because it is a method, technique, or
12 process, that derives actual or potential economic value from not being known, and is subject to
13 reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a method of using a
14 catheter, which can equally be called a technique or process.

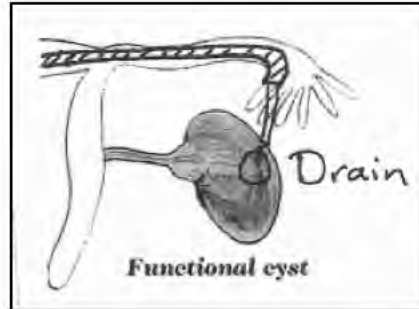
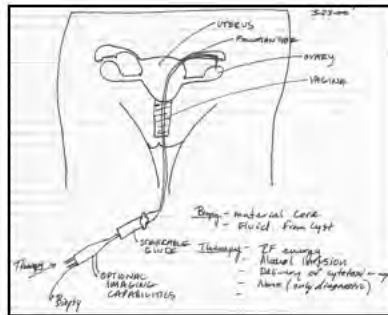
15 b. This trade secret derived both actual and potential value from not being generally
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21 c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade secret.
22 The only place where the secret was disclosed was in the March 2000 entry in Dr. Altman's lab
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24 notebook itself was restricted, and, prior to this litigation, only four people had seen the contents
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“confidential” and all documents containing BioCardia confidential information that was released externally were marked “confidential.” For example, BioCardia employees received, and BioCardia lab notebooks came with, a BioCardia memo on “Lab Notebook Document Control” to preserve secrecy. Finally, visitors to BioCardia had to sign-in to gain access to the facilities and were escorted by a company employee at all times. BioCardia has only ever had approximately twenty employees and an appropriately sized facility, so the presence of an unauthorized person would be recognized.

d. BioCardia is the owner of this trade secret because the two individuals who conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertzer, both assigned all right, title, and interest in the intellectual property to BioCardia, or its predecessor Hippocratic Engineering.

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The steerable guide gains access through the vagina to the fallopian tube and may be facilitated by fiber optic imaging.



The steerable guide once position may be used to advance imaging probes such as rotating ultrasound transducers, biopsy probes, therapeutic probes, or combinations of these.

f. nVision directly misappropriated this trade secret by disclosing and using the trade secret through improper means. For example, claim 1 of U.S. Patent No. 10,639,016 sets out all the components of this trade secret. nVision's efforts to develop and commercialize the Mako also misappropriated this trade secret, since implementation of the Mako device, such that a fluid reservoir supplies fluid through a hollow element to evert a balloon at the distal end of the catheter to collect cells from the fallopian tube, practices this trade secret. Mako documentation, such as the instructions for use, also disclose this trade secret since the documents describe using a fluid reservoir supplies fluid through a hollow element to evert a balloon at the distal end of the catheter to collect cells from the fallopian tube. BioCardia is informed and believes and on that basis alleges that nVision also misappropriated this trade secret through improper disclosure when, for example, nVision consulted with various physicians about the design, development, or clinical trials for the Mako device. As a result, nVision's actions to acquire patents on this trade secret, develop and market the Mako device that implements this trade secret, and disclose the trade secret to practitioners as part of the design and development of the Mako product, all constitute misappropriation of this trade secret.

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188. **Therapeutic strategy for identifying precancerous and cancerous growths based on a diagnosis performed from a locally-obtained sample before evidence of metastasis has appeared by, for example, obtaining a local biological sample derived from the ovary or adjacent fluids to determine that the ovary has a significant possibility of having a malignant cancer, and using this information to determine appropriate treatments:**

a. This therapeutic method is a trade secret because it is a method, technique, or process, that derives actual or potential economic value from not being known, and is subject to reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a method of using a

1 catheter, which can equally be called a technique or process.

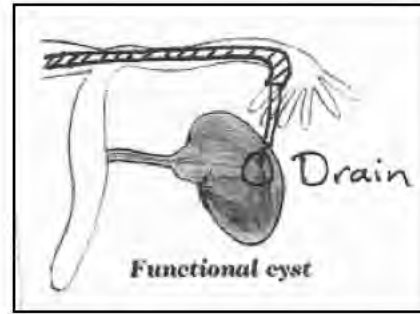
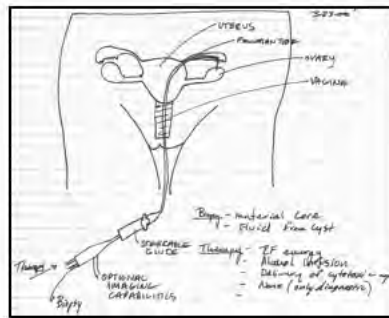
2 b. This trade secret derived both actual and potential value from not being generally
3 known to the public. For example, as Ms. Sarna set out in her 2013 presentation on nVision,
4 which BioCardia first reviewed in 2019, the addressable market for a non-invasive method for
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22 would be recognized.

23 d. BioCardia is the owner of this trade secret because the two individuals who
24 conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertz, both assigned
25 all right, title, and interest in the intellectual property to BioCardia, or its predecessor Hippocratic
26 Engineering.

27 e. Dr. Peter Altman disclosed this trade secret to Ms. Sarna when he described and
28 explained a March 2000 lab notebook entry to her during an hour-long meeting. The following

excerpts are examples of disclosures from the notebook that describe this trade secret:



A fluid biopsy probe, such as a hollow helical needle may be rotated into the ovary to obtain a sample of the cyst. Such a probe could also be used to drain the cyst. Such a probe could also be used to deliver RF energy to kill tissue in the cyst, or to deliver alcohol or cytotoxic agents designed to introduce necrosis locally.

The steerable guide gains access through the vagina to the fallopian tube and may be facilitated by fiber optic imaging.



The steerable guide once position may be used to advance imaging probes, such as rotating ultrasound transducers, biopsy probes, therapeutic probes, or combinations of these.

f. nVision directly misappropriated this trade secret by disclosing and using the trade secret through improper means. For example, claim 1 of U.S. Patent No. 10,639,016 sets out all the components of this trade secret. nVision's efforts to develop and commercialize the Mako also misappropriated this trade secret, since implementation of the Mako device, such that the everting balloon at the distal end of the catheter is used to obtain a local biological sample derived from the ovary or adjacent fluids to determine that the ovary has a significant possibility of having a malignant cancer, practices this trade secret. Mako documentation, such as the instructions for use, also disclose this trade secret since the documents describe using a catheter to obtain a local biological sample derived from the ovary or adjacent fluids to determine ovarian state. BioCardia is informed and believes and on that basis alleges that nVision also misappropriated this trade secret through improper disclosure when, for example, nVision consulted with various physicians about the design, development, or clinical trials for the Mako device. As a result, Ms. Sarna's actions to acquire patents on this trade secret, develop and

1 market the Mako device that implements this trade secret, and disclose the trade secret to
 2 practitioners as part of the design and development of the Mako product, all constitute
 3 misappropriation of this trade secret.

4 h. nVision's misappropriation damaged BioCardia. For example, because of Ms.
 5 Sarna's misappropriation, BioCardia missed out on the \$275 million valuation Boston Scientific
 6 placed on the intellectual property. Furthermore, nVision's commercialization of this trade secret
 7 prevented BioCardia from having a monopoly on the method, along with the financial benefits
 8 that monopoly would confer.

9 189. **Therapeutic strategy for delivering ablative compounds such as alcohol or**
 10 **ablative energy through a catheter system passed through a vagina, uterus, and fallopian**
 11 **tubes to treat disease or a condition of the ovary in which a penetrating element is advanced**
 12 **into the fallopian tubes, fimbria, or ovary:**

13 a. This therapeutic method is a trade secret because it is a method, technique, or
 14 process, that derives actual or potential economic value from not being known, and is subject to
 15 reasonable efforts to maintain its secrecy. As the trade secret suggests, it is a method of using a
 16 catheter, which can equally be called a technique or process.

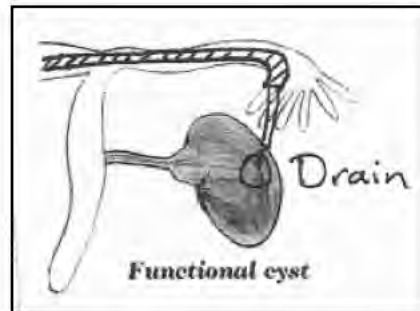
17 b. This trade secret derived both actual and potential value from not being generally
 18 known to the public. For example, as Ms. Sarna set out in her 2013 presentation on nVision,
 19 which BioCardia first reviewed in 2019, the addressable market for a non-invasive method for
 20 early detection of ovarian cancer was \$4 billion and involved roughly 8 million patients per year.
 21 Dkt 1 at Ex. B at slide 29. In addition, Boston Scientific paid \$275 million to purchase nVision
 22 based in part on its commercial development of this trade secret.

23 c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade secret.
 24 The only place where the secret was disclosed was in the March 2000 entry in Dr. Altman's lab
 25 notebook. Dr. Altman kept this lab notebook in a secure location in his office. Access to the
 26 notebook itself was restricted, and, prior to this litigation, only four people had seen the contents
 27 of this notebook entry related to this disclosure: Daniel Rosenman, Dr. Simon Stertz, Dr. Peter
 28 Altman, and Ms. Sarna. Each of these people entered into a non-disclosure agreement with

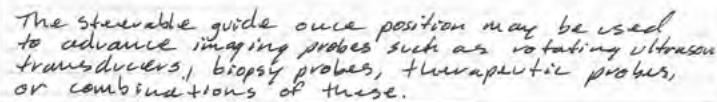
1 BioCardia, or its predecessor Hippocratic Engineering, to prevent disclosure to the public.
2 Furthermore, BioCardia internal documents containing confidential information were labelled
3 “confidential” and all documents containing BioCardia confidential information that was released
4 externally were marked “confidential.” For example, BioCardia employees received, and
5 BioCardia lab notebooks came with, a BioCardia memo on “Lab Notebook Document Control” to
6 preserve secrecy. Finally, visitors to BioCardia had to sign-in to gain access to the facilities and
7 were escorted by a company employee at all times. BioCardia has only ever had approximately
8 twenty employees and an appropriately sized facility, so the presence of an unauthorized person
9 would be recognized.

10 d. BioCardia is the owner of this trade secret because the two individuals who
11 conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertzer, both assigned
12 all right, title, and interest in the intellectual property to BioCardia, or its predecessor Hippocratic
13 Engineering.

14 e. Dr. Peter Altman disclosed this trade secret to Ms. Sarna when he described and
15 explained a March 2000 lab notebook entry to her during an hour-long meeting. The following
16 excerpts are examples of disclosures from the notebook that describe this trade secret:
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The steerable guide gains access through the vagina to the fallopian tube and may be facilitated by fiber optic imaging.



h. nVision's misappropriation damaged BioCardia. For example, because of nVision's misappropriation, BioCardia missed out on the \$275 million valuation Boston Scientific placed on the intellectual property. Furthermore, nVision's commercialization of this trade secret prevented BioCardia from having a monopoly on the method, along with the financial benefits that monopoly would confer.

190. **and cancerous cysts minimally invasively with details on the ramifications for therapy with early diagnosis, and strategies for doing so that align with new biological measurement technologies in gene expression and genetic analysis that enable a small sample to identify the presence of disease, including details on the players in the gene diagnosis space looking at blood (CareDx), solid tumor tissues (Genomic health), and cells sloughing from within a body lumen conduit such as that of a bowel movement which passes through the colon (EXACT Sciences):**

a. This market need is a trade secret because it is information that derives actual or potential economic value from not being known and is subject to reasonable efforts to maintain its secrecy.

b. This trade secret derived both actual and potential value from not being generally known to the public. For example, as Ms. Sarna set out in her 2013 presentation on nVision, the addressable market for a non-invasive method for early detection of ovarian cancer was \$4 billion and involved roughly 8 million patients per year. Dkt 1 at Ex. B at slide 29. In addition, Boston Scientific paid \$275 million to purchase nVision based in part on its commercial development of this trade secret.

c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade secret. The only people who were aware of this trade secret were Drs. Altman and Stertzer, and neither recorded this trade secret in the lab notebook or any other document. As a result, the secret could not be made public unless Dr. Altman or Dr. Stertzer made the conscious decision to disclose it. Both Drs. Altman and Stertzer were contractually bound to keep this BioCardia trade secret confidential by non-disclosure agreements.

d. BioCardia is the owner of this trade secret because the two individuals who

1 conceived of and developed the trade secret, Drs. Peter Altman and Simon Stertzer, both assigned
2 all right, title, and interest in the intellectual property to BioCardia, or its predecessor Hippocratic
3 Engineering.

4 e. Dr. Peter Altman disclosed this trade secret to Ms. Sarna when he described and
5 explained a March 2000 lab notebook entry to her during an hour-long meeting. Although this
6 particular trade secret was not recorded in the lab notebook, Dr. Altman had extensive knowledge
7 of the subject based on his involvement in CareDx, one of the leading gene expression profiling
8 companies in the world. Dr. Altman shared this knowledge with Ms. Sarna during their meeting
9 in or around May 2009, in the hopes that it would motivate her to further develop the concepts
10 disclosed in the March 2000 lab notebook entry.

11 f. nVision directly misappropriated this trade secret by disclosing and using the trade
12 secret through improper means. For example, claim 1 of PCT/US Patent Application No.
13 2018/000,229 sets out all the components of this trade secret, by, for example covering “a device
14 for Fallopian tube diagnostics” using tissue samples from the fallopian tubes. nVision’s efforts to
15 develop and commercialize the Mako also misappropriated this trade secret, since implementation
16 of the Mako device required use of gene expression technology in order to determine ovarian
17 state, thereby practicing this trade secret. Mako documentation, such as the instructions for use,
18 also disclose this trade secret. BioCardia is informed and believes and on that basis alleges that
19 nVision also misappropriated this trade secret through improper disclosure when, for example,
20 nVision consulted with various physicians about the design, development, or clinical trials for the
21 Mako device. As a result, nVision’s actions to acquire patents on this trade secret, develop and
22 market the Mako device that implements this trade secret, and disclose the trade secret to
23 practitioners as part of the design and development of the Mako product, all constitute
24 misappropriation of this trade secret.

25 h. nVision’s misappropriation damaged BioCardia. For example, because of
26 nVision’s misappropriation, BioCardia missed out on the \$275 million valuation Boston
27 Scientific placed on the intellectual property. Furthermore, nVison’s commercialization of this
28 trade secret prevented BioCardia from having a monopoly on the method, along with the financial

benefits that monopoly would confer.

Trade Secrets Disclosed by BioCardia Testing Equipment

191. **A catheter system which includes a distal spring element on its end and having a round spherical ball mounted on the spring to avoid damage to the lumen through which it is passed, by, for example, having of a catheter shaft with a hollow lumen, containing a fluid conduit, which passes through a helical metal spring on its distal end attached to a small ball attached to the distal most end:**

a. This ball-and-spring structure is a trade secret because it is a device that derives actual or potential economic value from not being known and is subject to reasonable efforts to maintain its secrecy.

b. This trade secret derived both actual and potential value from not being generally known to the public. It presents a novel way of preventing the tip of a catheter from damaging tissue as it is advanced in a body. This presents a competitive advantage to BioCardia in that it has a useful safety feature that other catheter companies do not have.

c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade secret. The spring-and-ball structure was part of testing equipment that BioCardia developed and built internally and was never shown to anyone outside the company. Even within the company, only a small subset of employees actually saw this testing equipment. Everyone who came into contact with the testing equipment was under a non-disclosure agreement.

d. BioCardia is the owner of this trade secret because the testing equipment was developed on behalf of BioCardia and the people who made the equipment assigned all rights, title, and interest to the equipment to BioCardia.

e. The testing equipment was disclosed to Ms. Sarna as part of her work at BioCardia. Ms. Sarna used this particular piece of equipment to ensure that catheters had the proper internal diameter to function properly.

f. NVision misappropriated this trade secret by disclosing it in patent applications.

g. Ms. Sarna's and Boston Scientific's misappropriation damaged BioCardia.

Trade Secrets Disclosed by BioCardia Template Documents

192. **BioCardia template documents sent to Ms. Sarna's personal email account, consisting of the following templates: Risk Analysis, Product Specification, Labelling Verification, and Document Change Order procedures:**

a. These template documents are trade secrets because they are information about how to effectively handle medical device tasks, that derive actual or potential economic value from not being known and are subject to reasonable efforts to maintain its secrecy.

b. This trade secret derived both actual and potential value from not being generally known to the public. The knowledge and experience inherent in the documents, and the time and resources saved from using the documents, confer a competitive advantage that makes medical device development more profitable. Because BioCardia's competitors do not have this information, BioCardia has an advantage in the form of better products made at lower cost.

c. BioCardia undertook reasonable efforts to preserve the secrecy of this trade secret. BioCardia internal documents containing confidential information were labelled "confidential" and all documents containing BioCardia confidential information that were released externally were marked "confidential."

d. BioCardia is the owner of this trade secret because the individuals who created these documents assigned all right, title, and interest in the intellectual property to BioCardia.

e. These trade secrets were disclosed to Ms. Sarna when they were shared with her as part of her work for BioCardia.

f. BioCardia is informed and believes and on that basis alleges that nVision incorporated the structure, format, and even language of the documents into nVision's corresponding documents.

g. nVision's misappropriation damaged BioCardia because it meant that nVision had this valuable information to assist it in making competing catheter products. In addition, these template documents helped nVision's transition from a start-up to an established organization, which meant they increased the competence of BioCardia's competition, and did so at a faster rate than normally would happen.

193. The BioCardia trade secrets were subject to efforts that are reasonable under the

1 circumstances to maintain their secrecy, including but not limited to, requiring all employees to
 2 execute the BioCardia standard Employment Agreement in the same form as the Sarna
 3 Agreement attached hereto as Exhibit A, restricting access to BioCardia's information to
 4 employees who have executed the BioCardia standard Employment Agreement, locking
 5 BioCardia's facilities and restricting access to BioCardia's facilities to employees who had signed
 6 the standard Employment Agreement and to visitors who are escorted by someone who had
 7 signed the standard Employment Agreement.

8 194. As a proximate result of the acts herein alleged, BioCardia is entitled to damages in
 9 an amount to be proven for nVision's misappropriation of BioCardia's trade secret claim;

10 195. As a proximate result of the acts herein alleged, BioCardia is entitled to exemplary
 11 damages in an amount of twice BioCardia's actual damages for Counterdefendants' willful and
 12 malicious misappropriation of the BioCardia Trade Secrets.

13 196. As a proximate result of the acts herein alleged, BioCardia is entitled to attorneys'
 14 fees for Counterdefendants' willful and malicious misappropriation of the BioCardia Trade Secrets.

15 197. BioCardia is informed and believes and on that basis alleges that the Shareholder
 16 Defendants are sophisticated companies and investors focused on investments in or acquisitions
 17 of early-stage companies (each an "Investment Target") and, thus, are familiar with intellectual
 18 property issues that Investment Targets have. These include, among other things, that a former
 19 employer of a founder of an Investment Target might have a claim to ownership of the inventions
 20 claimed by the Investment Target, or that the inventions claimed by the Investment Target may be
 21 based on trade secrets misappropriated from a former employer because, among other things.

22 a. They had been contractually assigned by the founder to the founder's former
 23 employer;

24 b. They were co-invented with an employee or employees of the founder's former
 25 employer; or

26 c. They were based on information learned at and/or belonging to the former employer.

27 198. BioCardia is informed and believes and on that basis alleges that because of,
 28 among other things, the intellectual property issues that an Investment Target might have with a

1 founder's former employer, the Shareholder Defendants customarily perform "due diligence" on
2 an Investment Target focusing particularly on ferreting out any issues that might exist with the
3 Investment Target's ownership or right to use its purported technology and intellectual property.

4 199. BioCardia is informed and believes and on that basis alleges that the Shareholder
5 Defendants focused on investments in and acquiring early-stage medical device companies and,
6 therefore, knew, or at least should have known, that BioCardia, the company nVision's founder,
7 Ms. Surbhi Sarna, worked for immediately prior to nVision, was also a medical device company
8 working on the same type of medical device that nVision planned to work on: diagnostic
9 catheters.

10 200. BioCardia is informed and believes and on that basis alleges that, as specialists in
11 investments in or acquisitions of early stage medical device companies, the Shareholder
12 Defendants knew or at least should have known there was a heightened risk – well beyond the
13 risks inherent in any early stage company - that nVision's technology and intellectual property
14 actually belonged to BioCardia.

15 201. BioCardia is informed and believes and on that basis alleges that, in addition to the
16 heightened risk inherent in the fact that nVision was focused on the same type of medical device
17 development as was BioCardia (diagnostic catheters), the Shareholder Defendants knew that there
18 was a likelihood that nVision's claimed technology and intellectual property actually belonged to
19 or had been misappropriated from BioCardia, because they knew or at least should have known
20 through their due diligence of nVision that:

21 a. Ms. Sarna's undergraduate major was molecular and cellular biology. She
22 does not have any graduate degrees. Her work at BioCardia dealt with tracking device
23 failures, ensuring label compliance, and obtaining materials from vendors. While at
24 BioCardia, Ms. Sarna's work responsibilities did not include designing or developing
25 medical devices. BioCardia is informed and believes and on that basis alleges that Ms.
26 Sarna's only other experience in the medical device space involved similar tasks as the
27 ones she performed at BioCardia. Ms. Sarna's age, education, and work experience were
28 highly unusual for someone who allegedly came up with a medical device and technique

1 so revolutionary that a company like Boston Scientific Corporation would value it at
2 hundreds of millions of dollars.

3 b. Ms. Sarna started consulting with BioCardia on September 15, 2008 and
4 became a full-time employee of BioCardia on November 3, 2008, at which time she
5 signed the Sarna Agreement, and where she worked until resigning in January 2012;

6 c. Ms. Sarna registered nVision as a Delaware corporation on September 28,
7 2009, the year after she joined BioCardia and more than two years before she left
8 BioCardia and apparently ran it in “stealth mode” to conceal its existence from BioCardia;

9 d. Ms. Sarna entered into a “Technology Transfer Agreement” “effective as
10 of December 26, 2009 between Surbhi Sarna (the ‘Founder’), and nVision Medical
11 Corporation, a Delaware corporation” more than two years before she left BioCardia.

12 e. In the Technology Transfer Agreement, Ms. Sarna assigned to nVision
13 “All rights, title and interests in and to all intellectual property arising out of or related to
14 the ‘nVision Medical; business plan, including, without limitation, all ideas, designs,
15 techniques, processes, formulas, trade secrets, inventions, discoveries, improvements,
16 research or development and test results, specifications, data, know-how, business
17 methods, marketing plans, other business plans, strategies, forecasts, unpublished
18 financial information, budgets, projections, business prospects, copyrights and trademarks
19 (inclusive of all goodwill relate thereto), and the following trademark, copyright, and
20 patent applications and registrations.” The patent application identified in the Technology
21 Transfer Agreement is a “USPTO provisional patent application filed on or around
22 September 29, 2009.”

23 f. Ms. Sarna only registered nVision to do business in California on February
24 21, 2012, about a month after she left BioCardia, when, BioCardia is informed and
25 believes and on that basis alleges, she believed it was no longer possible to conceal
26 nVision’s existence from BioCardia.

27 g. BioCardia is informed and believes and on that basis alleges that the
28 **incorporation** of nVision more than two years **before** Ms. Sarna left BioCardia, and the

1 *registration* of nVision to do business in California only *after* she had left BioCardia,
2 alone should have set off alarm bells in any competent due diligence conducted by or for
3 anyone seeking to invest in nVision;

4 h. Ms. Sarna, in common with most Silicon Valley employees, was
5 contractually obligated to assign to BioCardia inventions she made while working at
6 BioCardia (see Exhibit A attached hereto-the Sarna Agreement), subject only to her
7 proving that they were excluded by Labor Code § 2870, which BioCardia is informed and
8 believes and on that basis alleges that anyone seeking to invest in nVision would
9 understand was unlikely given that both nVision and BioCardia were in the same general
10 area of medical devices (diagnostic catheters);

11 i. On January 25, 2011, while a BioCardia employee and a year before Ms.
12 Sarna left BioCardia, Ms. Sarna filed U.S. Provisional application No. 61/435,945 (“the
13 ’945 provisional patent application”);

14 j. On December 3, 2010, while still a BioCardia employee and a year before
15 Ms. Sarna left BioCardia, Ms. Sarna emailed Anula Jayasuriya, then affiliated with
16 Defendant Astia Angels nVision LLC and later affiliated with Defendant eXXclaim
17 Capital Partners I, L.P., and Linda Greub, then a partner at Defendant LMNVC, LLC,
18 from her BioCardia account requesting help conceptualizing the invention of the ’945
19 provisional patent application;

20 k. Ms. Sarna subsequently filed three other published applications claiming
21 priority to the ’945 provisional patent application;

22 l. On November 13, 2011, also while still a BioCardia employee, Ms. Sarna
23 filed a provisional application entitled “Device and method to confirm occlusion of
24 the fallopian tube”; and

25 m. Ms. Sarna subsequently filed Application No. 14/357,875, which claimed
26 priority to the ’120 provisional patent application.

27 202. BioCardia is informed and believes and on that basis alleges that the Shareholder
28 Defendants knew, or at least should have known, that the filing of all of these patent applications

1 while Ms. Sarna was employed by BioCardia, but which were assigned to nVision, meant that the
2 patent applications likely had been contractually assigned to BioCardia.

3 203. BioCardia is informed and believes and on that basis alleges that the Shareholder
4 Defendants also knew, or at least should have known, that the filing of all of these patent
5 applications while Ms. Sarna was employed by BioCardia, but which were assigned to nVision,
6 meant that there likely were unnamed BioCardia co-inventors on some or all of the patent
7 applications.

8 204. BioCardia is informed and believes and on that basis alleges that the Shareholder
9 Defendants also knew, or at least should have known, that the filing of all of these patent
10 applications while Ms. Sarna was employed by BioCardia, but which were assigned to nVision,
11 together with the other acts alleged above while Ms. Sarna was a BioCardia employee, meant that
12 nVision's purported technology and intellectual property likely was based on misappropriated
13 BioCardia trade secrets.

14 205. The risks undertaken by an investor who knows or should know that the
15 technology and intellectual property claimed by an Investment Target likely belongs to a former
16 employer as is with the case with the patents Ms. Sarna was contractually obligated to assign to
17 BioCardia, or is likely based on trade secrets misappropriated from a former employer, is unlike
18 any common investment and market risk. While common investment risks, if realized, might
19 operate to reduce the value of the Investment Target and, therefore, the value of the investor's
20 investment, an investor who knows or should know that the technology and intellectual property
21 claimed by an Investment Target is likely based on patents rightfully owned by another or trade
22 secrets misappropriated from another is exposed to the equitable rights of the rightful owner of
23 the technology and intellectual property, including, as alleged below, the risk of disgorgement of
24 all benefits of the investment.

25 206. Here, the Shareholder Defendants' investment in nVision was made with the
26 actual or imputed knowledge that the technology and intellectual property claimed by Ms. Sarna
27 and nVision was likely based on patents belonging to and trade secrets misappropriated from
28 BioCardia; accordingly, they did not undertake a common investment risk but, rather, undertook

1 the risk of disgorgement of all benefits from their investment.

2 207. The Shareholder Defendants' liability to BioCardia is direct, not vicarious, and
3 does not require piercing nVision's corporate veil.

4 208. BioCardia is informed and believes and on that basis alleges that the Shareholder
5 Defendants made a conscious decision to participate in and further the wrongful acts of nVision
6 and Ms. Sarna by investing in nVision and providing it with the funding necessary to commit the
7 acts as herein alleged.

8 209. Alternatively, BioCardia is informed and believes and on that basis alleges that the
9 Shareholder Defendants knew or should have known that nVision and Ms. Sarna had acted in
10 violation of BioCardia's rights. Their investments in nVision were made "despite a known risk
11 that the conduct in question violate[d] the rights of [BioCardia]." Under California law and
12 Sections 51(3)(b) and 3 comment e, of the Restatement (Third) of Restitution and Unjust
13 Enrichment, their decision to invest in nVision despite that known risk of liability – i.e., despite
14 that "known unknown" – renders them "conscious wrongdoers" and places upon them the risk of
15 liability by a disgorgement measure.

16 210. BioCardia is informed and believes and on that basis alleges that the Shareholder
17 Defendants provided funding to nVision that was a substantial factor in enabling nVision and Ms.
18 Sarna to commit the acts as herein alleged, and that the Shareholder Defendants knowingly
19 benefited from the acts as herein alleged.

20 211. The Shareholder Defendants are required to disgorge to BioCardia the amount of
21 their unjust enrichment as a result of the acts alleged, including at least the amount Boston
22 Scientific paid the Shareholder Defendants for their shares of stock in nVision.

23 212. BioCardia is informed and believes and on that basis alleges that Fortis Advisors
24 LLC, as Stockholders' Representative, is holding in trust approximately ten percent (10%) of the
25 amount paid by Boston Scientific Corporation for the nVision stock of the Shareholder
26 Defendants, among other shareholders, resulting from their provision of funding to nVision that
27 was a substantial factor in enabling nVision and Ms. Sarna to commit the acts as herein alleged,
28 and therefore Fortis is required to disgorge to BioCardia the amount it holds in trust for the

1 Shareholder Defendants. The Shareholder Defendants are required to direct Fortis Advisors LLC
 2 to disgorge to BioCardia any amounts received from Boston Scientific Corporation that Fortis
 3 Advisors LLC is holding for the benefit of the Shareholder Defendants as a result of the
 4 Shareholders Defendants' unjust enrichment as a result of the acts alleged, including at least the
 5 amount Boston Scientific paid the Shareholder Defendants for their shares of stock in nVision.

6 213. As a further direct and proximate result of Ms. Sarna's breaches of the Sarna
 7 Agreement, Defendants have been unjustly enriched for example, in an amount equal to at least
 8 what Boston Scientific paid for nVision. Defendants have been enriched by Ms. Sarna's breaches
 9 of contract, reaping benefits they would not otherwise have achieved in the absence of the
 10 breaches. Defendants received benefits in the form of intellectual property and money based on
 11 Ms. Sarna's breaches of contract as alleged above. Defendants' retention of the benefits they
 12 received from Ms. Sarna's breaches of contract is unjust as Ms. Sarna was not contractually
 13 permitted to share these benefits with anyone else. As such, BioCardia is entitled to
 14 disgorgement of all of Defendants' profits and consequential gains reaped from their unjust
 15 enrichment, restitution based on the benefits received and a constructive trust over the unlawful
 16 benefits received as a result of Ms. Sarna's breaches of the Sarna Agreement.

17 214. In addition, a constructive trust should be imposed on nVision for the benefit of
 18 BioCardia on, among other things, (1) any monetary consideration paid by Boston Scientific and
 19 retained by nVision; (2) title to the '945 Provisional Application Family, the '120 Provisional
 20 Application Family, the '472 Application Family, and the Additional Provisional Applications
 21 and (3) the trade secrets and other intellectual property taken by Ms. Sarna, and nVision should
 22 be ordered to transfer or assign to BioCardia all of the forgoing.

23 **COUNT IV**

24 **(Misappropriation of Trade Secrets under the Defend Trade Secrets Act, 18 U.S.C. § 1836)** 25 **(Against nVision and Imposition of Constructive Trust Against All Defendants)**

26 215. BioCardia realleges paragraphs 1-72 and 167-192, inclusive.

27 216. The Defend Trade Secrets Act, 18 U.S.C. § 1836, applies because at least some of
 28

1 the acts of misappropriation, including at least the disclosure or use of the BioCardia Trade Secrets,
 2 occurred after the May 11, 2016 effective date of the Act.

3 217. As a proximate result of the acts herein alleged, BioCardia is entitled to damages in
 4 an amount to be proven for nVision's misappropriation of BioCardia's trade secrets;

5 218. As a proximate result of the acts herein alleged, BioCardia is entitled to exemplary
 6 damages in an amount of twice BioCardia's actual damages for Defendants' willful and malicious
 7 misappropriation of the BioCardia Trade Secrets.

8 219. As a proximate result of the acts herein alleged, BioCardia is entitled to attorneys'
 9 fees for Defendants' willful and malicious misappropriation of BioCardia's trade secrets.

10 220. BioCardia is informed and believes and on that basis alleges that the Shareholder
 11 Defendants are sophisticated companies and investors focused on investments in or acquisitions
 12 of early-stage companies (each an "Investment Target") and, thus, are familiar with intellectual
 13 property issues that Investment Targets have. These include, among other things, that a former
 14 employer of a founder of an Investment Target might have a claim to ownership of the inventions
 15 claimed by the Investment Target, or that the inventions claimed by the Investment Target may be
 16 based on trade secrets misappropriated from a former employer because, among other things.

17 a. They had been contractually assigned by the founder to the founder's former
 18 employer;

19 b. They were co-invented with an employee or employees of the founder's former
 20 employer; or

21 c. They were based on information learned at and/or belonging to the former employer.

22 221. BioCardia is informed and believes and on that basis alleges that because of,
 23 among other things, the intellectual property issues that an Investment Target might have with a
 24 founder's former employer, the Shareholder Defendants customarily perform "due diligence" on
 25 an Investment Target focusing particularly on ferreting out any issues that might exist with the
 26 Investment Target's ownership or right to use its purported technology and intellectual property.

27 222. BioCardia is informed and believes and on that basis alleges that the Shareholder
 28 Defendants focused on investments in and acquiring early-stage medical device companies and,

1 therefore, knew, or at least should have known, that BioCardia, the company nVision's founder,
2 Ms. Surbhi Sarna, worked for immediately prior to nVision, was also a medical device company
3 working on the same type of medical device that nVision planned to work on: diagnostic
4 catheters.

5 223. BioCardia is informed and believes and on that basis alleges that, as specialists in
6 investments in or acquisitions of early stage medical device companies, the Shareholder
7 Defendants knew or at least should have known there was a heightened risk – well beyond the
8 risks inherent in any early stage company - that nVision's technology and intellectual property
9 actually belonged to BioCardia.

10 224. BioCardia is informed and believes and on that basis alleges that, in addition to the
11 heightened risk inherent in the fact that nVision was focused on the same type of medical device
12 development as was BioCardia (diagnostic catheters), the Shareholder Defendants knew that there
13 was a likelihood that nVision's claimed technology and intellectual property actually belonged to
14 or had been misappropriated from BioCardia, because they knew or at least should have known
15 through their due diligence of nVision that:

16 a. Ms. Sarna's undergraduate major was molecular and cellular biology. She
17 does not have any graduate degrees. Her work at BioCardia dealt with tracking device
18 failures, ensuring label compliance, and obtaining materials from vendors. While at
19 BioCardia, Ms. Sarna's work responsibilities did not include designing or developing
20 medical devices. BioCardia is informed and believes and on that basis alleges that Ms.
21 Sarna's only other experience in the medical device space involved similar tasks as the
22 ones she performed at BioCardia. Ms. Sarna's age, education, and work experience were
23 highly unusual for someone who allegedly came up with a medical device and technique
24 so revolutionary that a company like Boston Scientific Corporation would value it at
25 hundreds of millions of dollars.

26 b. Ms. Sarna started consulting with BioCardia on September 15, 2008 and
27 became a full-time employee of BioCardia on November 3, 2008, at which time she
28 signed the Sarna Agreement, and where she worked until resigning in January 2012;

1 c. Ms. Sarna registered nVision as a Delaware corporation on September 28,
2 2009, the year after she joined BioCardia and more than two years before she left
3 BioCardia and apparently ran it in “stealth mode” to conceal its existence from BioCardia;

4 d. Ms. Sarna entered into a “Technology Transfer Agreement” “effective as
5 of December 26, 2009 between Surbhi Sarna (the ‘Founder’), and nVision Medical
6 Corporation, a Delaware corporation” more than two years before she left BioCardia.

7 e. In the Technology Transfer Agreement, Ms. Sarna assigned to nVision
8 “All rights, title and interests in and to all intellectual property arising out of or related to
9 the nVision Medical business plan, including, without limitation, all ideas, designs,
10 techniques, processes, formulas, trade secrets, inventions, discoveries, improvements,
11 research or development and test results, specifications, data, know-how, business
12 methods, marketing plans, other business plans, strategies, forecasts, unpublished
13 financial information, budgets, projections, business prospects, copyrights and trademarks
14 (inclusive of all goodwill relate thereto), and the following trademark, copyright, and
15 patent applications and registrations.” The patent application identified in the Technology
16 Transfer Agreement is a “USPTO provisional patent application filed on or around
17 September 29, 2009.”

18 f. Ms. Sarna only registered nVision to do business in California on February
19 21, 2012, about a month after she left BioCardia, when, BioCardia is informed and
20 believes and on that basis alleges, she believed it was no longer possible to conceal
21 nVision’s existence from BioCardia.

22 g. BioCardia is informed and believes and on that basis alleges that the
23 **incorporation** of nVision more than two years **before** Ms. Sarna left BioCardia, and the
24 **registration** of nVision to do business in California only **after** she had left BioCardia,
25 alone should have set off alarm bells in any competent due diligence conducted by or for
26 anyone seeking to invest in nVision;

27 h. Ms. Sarna, in common with most Silicon Valley employees, was
28 contractually obligated to assign to BioCardia inventions she made while working at

1 BioCardia (see **Exhibit A** attached hereto-the Sarna Agreement), subject only to her
2 proving that they were excluded by Labor Code § 2870, which BioCardia is informed and
3 believes and on that basis alleges that anyone seeking to invest in nVision would
4 understand was unlikely given that both nVision and BioCardia were in the same general
5 area of medical devices (diagnostic catheters);

6 i. On January 25, 2011, while a BioCardia employee and a year before Ms.
7 Sarna left BioCardia, Ms. Sarna filed U.S. Provisional application No. 61/435,945 (“the
8 ’945 provisional patent application”);

9 j. On December 3, 2010, while still a BioCardia employee and a year before
10 Ms. Sarna left BioCardia, Ms. Sarna emailed Anula Jayasuriya, then affiliated with
11 Defendant Astia Angels nVision LLC and later affiliated with Defendant eXXclaim
12 Capital Partners I, L.P., and Linda Greub, then a partner at Defendant LMNVC, LLC,
13 from her BioCardia account requesting help conceptualizing the invention of the ’945
14 provisional patent application;

15 k. Ms. Sarna subsequently filed three other published applications claiming
16 priority to the ’945 provisional patent application;

17 l. On November 13, 2011, also while still a BioCardia employee, Ms. Sarna
18 filed a provisional application entitled “Device and method to confirm occlusion of
19 the fallopian tube”; and

20 m. Ms. Sarna subsequently filed Application No, 14/357,875, which claimed
21 priority to the ’120 provisional patent application.

22 225. BioCardia is informed and believes and on that basis alleges that the Shareholder
23 Defendants knew, or at least should have known, that the filing of all of these patent applications
24 while Ms. Sarna was employed by BioCardia, but which were assigned to nVision, meant that the
25 patent applications likely had been contractually assigned to BioCardia.

26 226. BioCardia is informed and believes and on that basis alleges that the Shareholder
27 Defendants also knew, or at least should have known, that the filing of all of these patent
28 applications while Ms. Sarna was employed by BioCardia, but which were assigned to nVision,

1 meant that there likely were unnamed BioCardia co-inventors on some or all of the patent
2 applications.

3 227. BioCardia is informed and believes and on that basis alleges that the Shareholder
4 Defendants also knew, or at least should have known, that the filing of all of these patent
5 applications while Ms. Sarna was employed by BioCardia, but which were assigned to nVision,
6 together with the other acts alleged above while Ms. Sarna was a BioCardia employee, meant that
7 nVision's purported technology and intellectual property likely was based on misappropriated
8 BioCardia trade secrets.

9 228. The risks undertaken by an investor who knows or should know that the
10 technology and intellectual property claimed by an Investment Target likely belongs to a former
11 employer as is with the case with the patents Ms. Sarna was contractually obligated to assign to
12 BioCardia, or is likely based on trade secrets misappropriated from a former employer, is unlike
13 any common investment and market risk. While common investment risks, if realized, might
14 operate to reduce the value of the Investment Target and, therefore, the value of the investor's
15 investment, an investor who knows or should know that the technology and intellectual property
16 claimed by an Investment Target is likely based on patents rightfully owned by another or trade
17 secrets misappropriated from another is exposed to the equitable rights of the rightful owner of
18 the technology and intellectual property, including, as alleged below, the risk of disgorgement of
19 all benefits of the investment.

20 229. Here, the Shareholder Defendants' investment in nVision was made with the
21 actual or imputed knowledge that the technology and intellectual property claimed by Ms. Sarna
22 and nVision was likely based on patents belonging to and trade secrets misappropriated from
23 BioCardia; accordingly, they did not undertake a common investment risk but, rather, undertook
24 the risk of disgorgement of all benefits from their investment.

25 230. The Shareholder Defendants' liability to BioCardia is direct, not vicarious, and
26 does not require piercing nVision's corporate veil.

27 231. BioCardia is informed and believes and on that basis alleges that the Shareholder
28 Defendants made a conscious decision to participate in and further the wrongful acts of nVision

1 and Ms. Sarna by investing in nVision and providing it with the funding necessary to commit the
2 acts as herein alleged.

3 232. Alternatively, BioCardia is informed and believes and on that basis alleges that the
4 Shareholder Defendants knew or should have known that nVision and Ms. Sarna had acted in
5 violation of BioCardia's rights. Their investments in nVision were made "despite a known risk
6 that the conduct in question violate[d] the rights of [BioCardia]." Under California law and
7 Sections 51(3)(b) and 3 comment e, of the Restatement (Third) of Restitution and Unjust
8 Enrichment, their decision to invest in nVision despite that known risk of liability – i.e., despite
9 that "known unknown" – renders them "conscious wrongdoers" and places upon them the risk of
10 liability by a disgorgement measure.

11 233. BioCardia is informed and believes and on that basis alleges that the Shareholder
12 Defendants provided funding to nVision that was a substantial factor in enabling nVision and Ms.
13 Sarna to commit the acts as herein alleged, and that the Shareholder Defendants knowingly
14 benefited from the acts as herein alleged.

15 234. The Shareholder Defendants are required to disgorge to BioCardia the amount of
16 their unjust enrichment as a result of the acts alleged, including at least the amount Boston
17 Scientific paid the Shareholder Defendants for their shares of stock in nVision.

18 235. BioCardia is informed and believes and on that basis alleges that Fortis Advisors
19 LLC, as Stockholders' Representative, is holding in trust approximately ten percent (10%) of the
20 amount paid by Boston Scientific Corporation for the nVision stock of the Shareholder
21 Defendants, among other shareholders, resulting from their provision of funding to nVision that
22 was a substantial factor in enabling nVision and Ms. Sarna to commit the acts as herein alleged,
23 and therefore Fortis is required to disgorge to BioCardia the amount it holds in trust for the
24 Shareholder Defendants. The Shareholder Defendants are required to direct Fortis Advisors LLC
25 to disgorge to BioCardia any amounts received from Boston Scientific Corporation that Fortis
26 Advisors LLC is holding for the benefit of the Shareholder Defendants as a result of the
27 Shareholders Defendants' unjust enrichment as a result of the acts alleged, including at least the
28 amount Boston Scientific paid the Shareholder Defendants for their shares of stock in nVision.

236. As a further direct and proximate result of Ms. Sarna's breaches of the Sarna Agreement, Defendants have been unjustly enriched for example, in an amount equal to at least what Boston Scientific paid for nVision. Defendants have been enriched by Ms. Sarna's breaches of contract, reaping benefits they would not otherwise have achieved in the absence of the breaches. Defendants received benefits in the form of intellectual property and money based on Ms. Sarna's breaches of contract as alleged above. Defendants' retention of the benefits they received from Ms. Sarna's breaches of contract is unjust as Ms. Sarna was not contractually permitted to share these benefits with anyone else. As such, BioCardia is entitled to disgorgement of all of Defendants' profits and consequential gains reaped from their unjust enrichment, restitution based on the benefits received and a constructive trust over the unlawful benefits received as a result of Ms. Sarna's breaches of the Sarna Agreement.

237. In addition, a constructive trust should be imposed on nVision for the benefit of BioCardia on, among other things, (1) any monetary consideration paid by Boston Scientific and retained by nVision; (2) title to the '945 Provisional Application Family, the '120 Provisional Application Family, the '472 Application Family, and the Additional Provisional Applications and (3) the trade secrets and other intellectual property taken by Ms. Sarna, and nVision should be ordered to transfer or assign to BioCardia all of the forgoing.

PRAYER FOR RELIEF

1. Damages against nVision in an amount to be proven on BioCardia's misappropriation of trade secret claim;

2. Exemplary damages against nVision in an amount of twice BioCardia's actual damages for nVision's willful and malicious misappropriation of the BioCardia Trade Secrets;

3. Attorneys' fees against nVision for its willful and malicious misappropriation of BioCardia's trade secrets;

4. An order correcting the inventorship of the '945 Provisional Application Family, the '120 Provisional Application Family, the '472 Application Family and the Additional Provisional Applications to name Dr. Peter Altman and Dr. Simon Stertzner as co-inventors.

5. An order imposing a constructive trust for the benefit of BioCardia, on and

1 compelling the assignment to BioCardia, of each of the patents and patent applications in the '945
2 Provisional Application Family, the '120 Provisional Application Family, the '472 Application
3 Family and the Additional Provisional Applications;

4 6. An order requiring the disgorgement to BioCardia by the Shareholder Defendants
5 of the consideration Boston Scientific paid for their nVision stock and all consequential gains
6 reaped from their unjust enrichment;

7 7. An order requiring the Shareholder Defendants to direct Fortis Advisors LLC to
8 disgorge to BioCardia any consideration Boston Scientific paid for the Shareholder Defendants'
9 nVision stock and held by Fortis Advisors LCC and all consequential gains reaped from their unjust
10 enrichment;

11 8. Pre-judgment and post-judgment interest; and

12 9. Such further and other relief as the Court may deem proper and just.

13
14 Dated: September 11, 2020

By /s/ Ian N. Feinberg
Ian N. Feinberg

16 Attorneys for Plaintiff BioCardia, Inc.

17 **DEMAND FOR JURY TRIAL**

18 BioCardia demands trial by jury on all claims and issues so triable.

19
20 Dated: September 11, 2020

By /s/ Ian N. Feinberg
Ian N. Feinberg

22 Attorneys for Plaintiff BioCardia, Inc.